

Section V. ORGANIZATIONAL MAINTENANCE

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4-11. TRANSCEIVER UNIT AND TRANSCEIVER UNIT BRACKET REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

- TM 08594A-10/2
- TM 08594A-10/1A

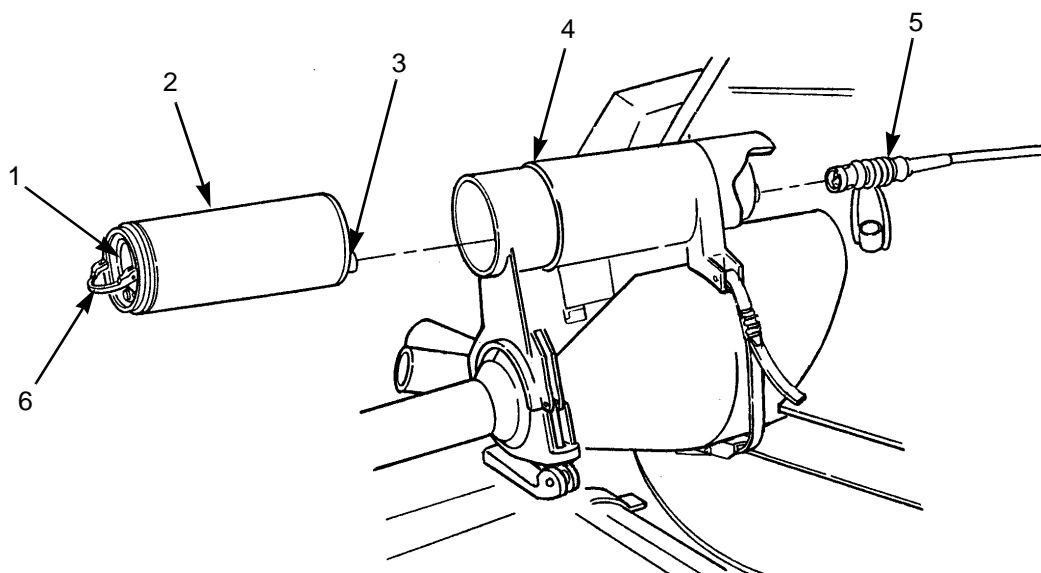
4-11. TRANSCEIVER UNIT AND TRANSCEIVER UNIT BRACKET REPLACEMENT (Con't).

WARNING

- Vehicle **MASTER SWITCH** and turret power must be **OFF** before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.
- **TURRET DRIVE LOCK** must be in locked position before connecting or disconnecting system components/cables. Failure to follow this warning may result in injury or death to personnel.

a. REMOVAL

1. Disconnect W1 cable connector J2 (5) from transceiver unit connector J2 (3).
2. Push locking handle (6) down and remove transceiver unit (2) from mounting bracket (4).



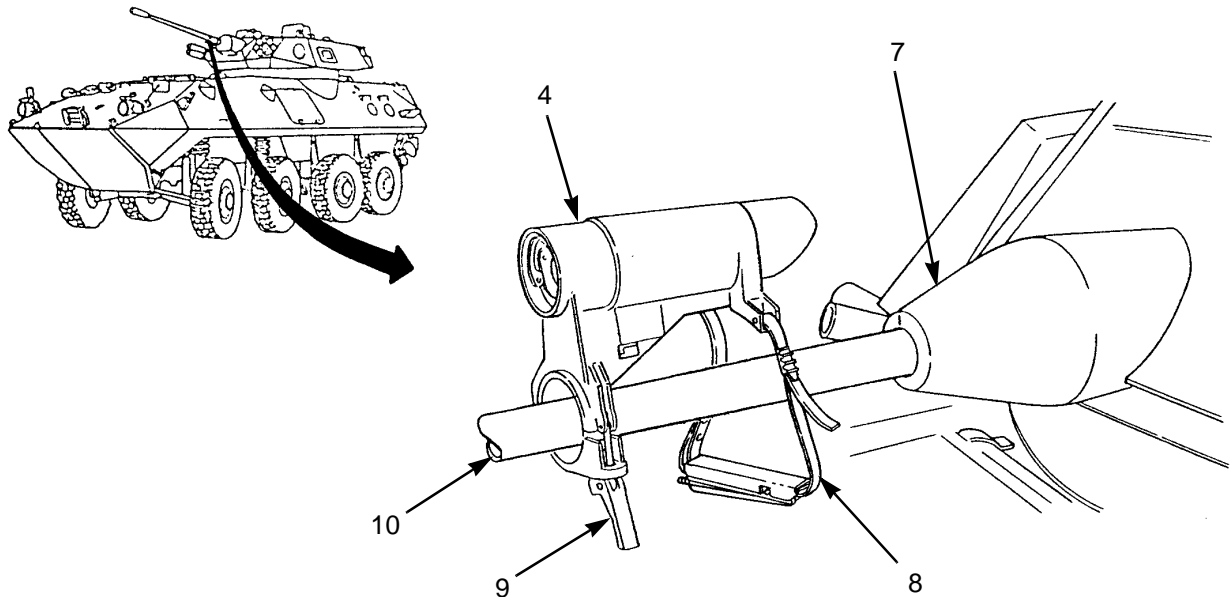
3. Release strap (8), unlock locking handle (9), and remove mounting bracket (4) from rotor extension (7) of 25 mm gun barrel (10).

b. INSTALLATION

1. Unlock locking handle (9), slide mounting bracket (4) over end of 25 mm gun barrel (10), and position at 12 o'clock on top of rotor extension (7).
2. Push locking handle (9) up to locked position. Secure strap (8) around rotor extension (7).
3. Lift locking handle (6) and position transceiver unit (2) in mounting bracket (4).

4-11. TRANSCEIVER UNIT AND TRANSCEIVER UNIT BRACKET REPLACEMENT (Con't).

4. Using locking handle (6), rotate transceiver unit (2) until laser lens (1) is at 12 o'clock position.



CAUTION

Ensure that transceiver unit is properly **LOCKED** into mounting bracket by checking that transceiver unit locking handle is in raised position. Failure to perform this check may result in transceiver unit falling out of mounting bracket and becoming damaged.

NOTE

Transceiver unit is properly installed when locking handle in locked position is flush with mounting bracket.

5. Push locking handle (6) up to locked position.
6. Connect W1 cable connector J2 (5) to transceiver unit connector J2 (3).

FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform Built-In Test (BIT) (see paragraph 2-6).
- Perform alignment procedures (see paragraph 2-7).

4-12. FRONT RETRO DETECTOR/HULL DEFILADE DETECTOR (RDU/HDDU) ASSEMBLY REPLACEMENT.

This Task Covers:

- | | |
|---|--|
| a. Front Retro Detector/Hull Defilade Detector Assembly Removal | c. Hull Defilade Detector Unit Replacement |
| b. Retro Detector Unit Replacement | d. Front Retro Detector/Hull Defilade Detector Assembly Installation |

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

- TM 08594A-10/1A
 - TM 08594A-10/2
-

WARNING

- Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.
- TURRET DRIVE LOCK must be in locked position before connecting or disconnecting system components/cables. Failure to follow this warning may result in injury or death to personnel.

NOTE

- Front retro detector/hull defilade detector assemblies and units are removed/installed the same way. Right-front is illustrated.
- Right-front retro detector/hull defilade detector assembly bracket also mounts RSI antenna.

a. FRONT RETRO DETECTOR/HULL DEFILADE DETECTOR ASSEMBLY REMOVAL

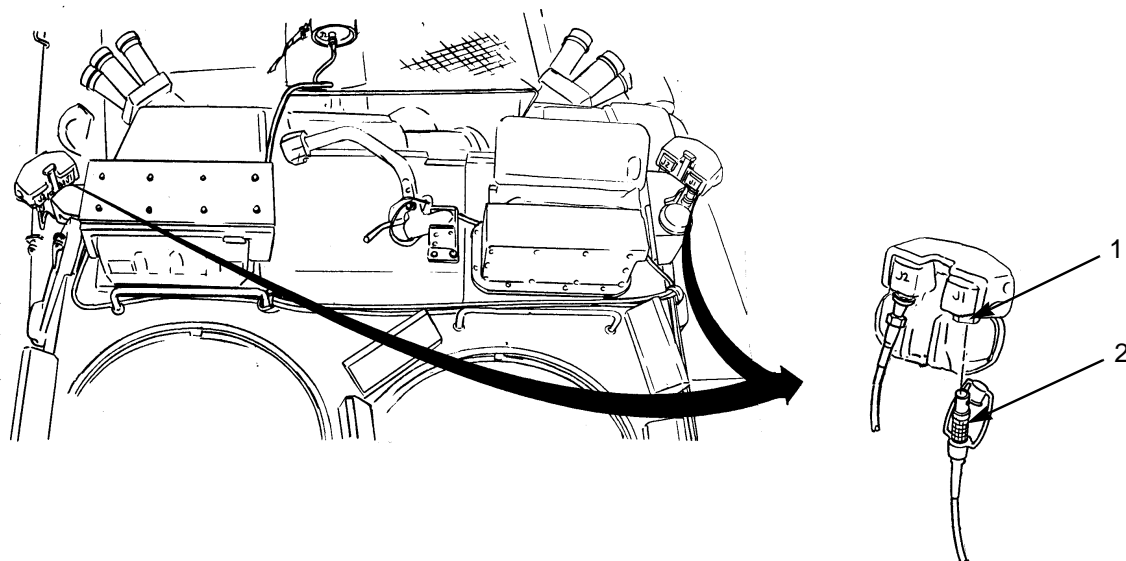
1. Disconnect W7 cable connector J1 (2) from RDU connector J1 (1).

NOTE

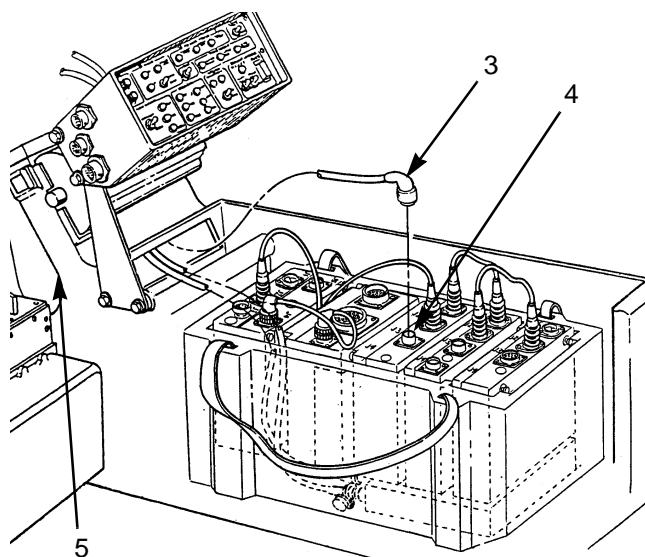
Perform steps 2 through 4 if removing right-front RDU/HDDU assembly.

2. Remove HE ammunition box lid (see TM 08594A-10/1A).

4-12. FRONT RETRO DETECTOR/HULL DEFILADE DETECTOR (RDU/HDDU) ASSEMBLY REPLACEMENT (Con't).

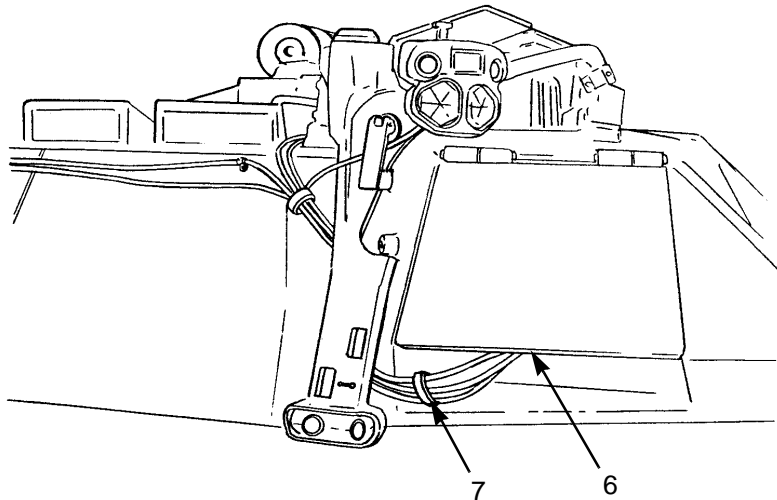


3. Disconnect RSI antenna cable connector (3) from RSI unit connector J3 (4) and feed cable through ammunition feed port (5). Unfasten velcro strap at commander's DIM36TH.

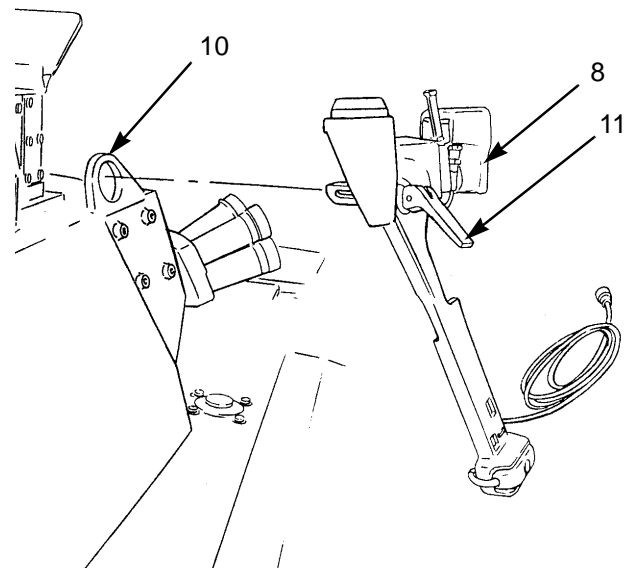


4-12. FRONT RETRO DETECTOR/HULL DEFILADE DETECTOR (RDU/HDDU) ASSEMBLY REPLACEMENT (Con't).

4. Feed RSI antenna cable to exterior of turret through ammunition ejection port (6) and unfasten velcro strap (7) releasing RSI antenna cable from cable bundle.



5. Lift locking handle (11) and remove RDU/HDDU assembly bracket (8) from turret lifting eye (10).



b. RETRO DETECTOR UNIT REPLACEMENT

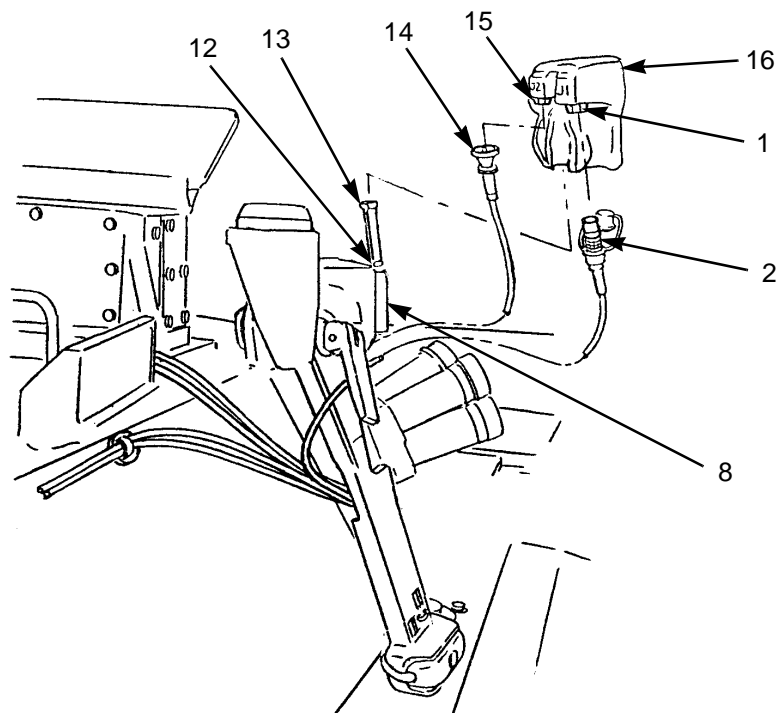
NOTE

This step can be performed with assembly mounted to vehicle.

1. Disconnect W7 cable connector J1 (2) from RDU connector J1 (1).

4-12. FRONT RETRO DETECTOR/HULL DEFILADE DETECTOR (RDU/HDDU) ASSEMBLY REPLACEMENT (Con't).

2. Disconnect HDDU connector J2 (14) from RDU connector J2 (15).
3. Pull up on retaining strap (13) and release crosspin (12) from RDU (16).
4. Slide RDU (16) up off of assembly bracket (8).
5. Slide RDU (16) down on to assembly bracket (8).
6. Pull up on retaining strap (13) and secure crosspin (12) on RDU (16).
7. Connect HDDU connector J2 (14) to RDU connector J2 (15).
8. Connect W7 cable connector J1 (2) to RDU connector J1 (1).



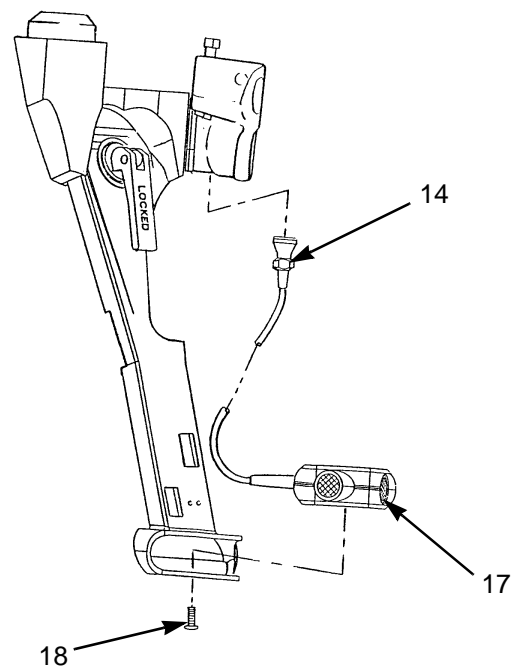
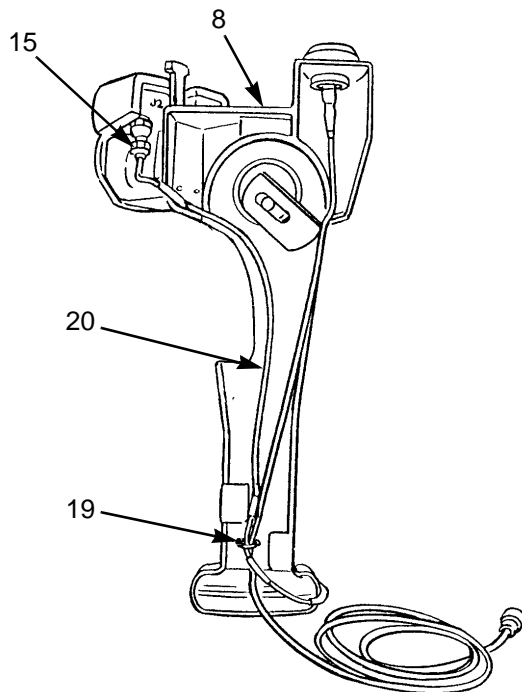
4-12. FRONT RETRO DETECTOR/HULL DEFILADE DETECTOR (RDU/HDDU) ASSEMBLY REPLACEMENT (Con't).

c. HULL DEFILADE DETECTOR UNIT REPLACEMENT

NOTE

This step must be performed with assembly removed from vehicle.

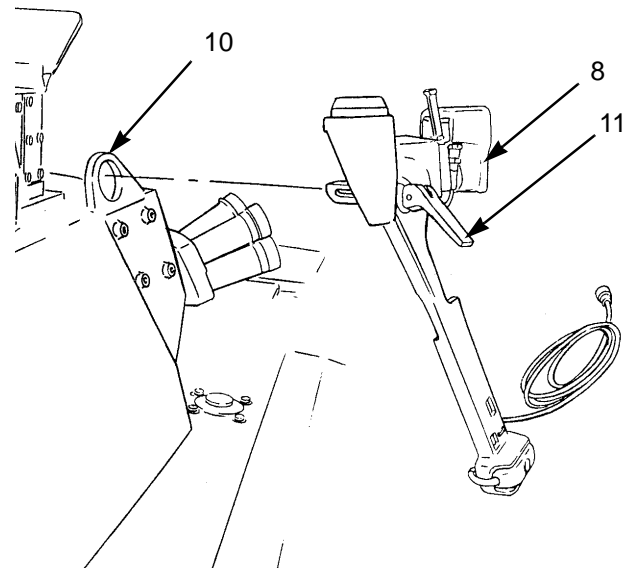
1. Disconnect HDDU connector J2 (14) from RDU connector J2 (15).
2. Remove tie wrap (19) that secures HDDU cable (20) from assembly bracket (8).
3. Remove screw (18) and HDDU (17) from assembly bracket (8).
4. Position HDDU (17) on assembly bracket (8) and secure with screw (18).
5. Route HDDU cable (20) along inside of assembly bracket (8) to RDU connector J2 (15) and secure with tie wrap (19).
6. Connect HDDU connector J2 (14) to RDU connector J2 (15).



4-12. FRONT RETRO DETECTOR/HULL DEFILADE DETECTOR (RDU/HDDU) ASSEMBLY REPLACEMENT (Con't).

d. FRONT RETRO DETECTOR/HULL DEFILADE DETECTOR ASSEMBLY INSTALLATION

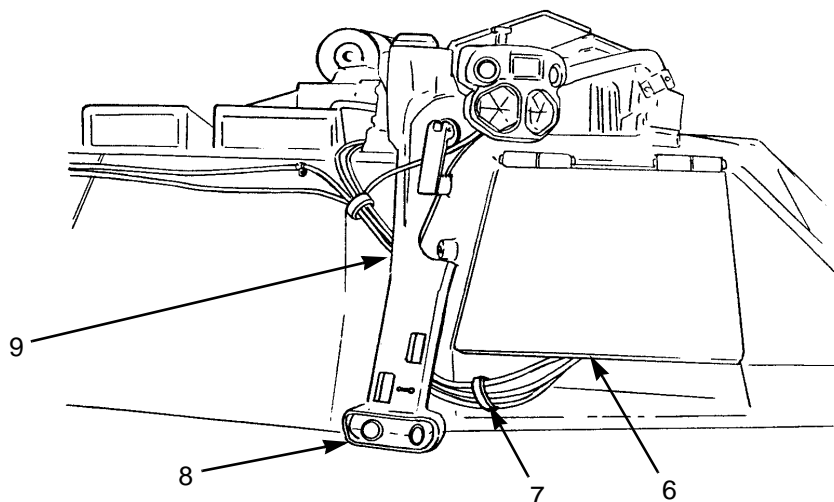
1. Lift locking handle (11) and position RDU/HDDU assembly bracket (8) on turret lifting eye (10). For left-front RDU/HDDU, push locking handle (11) down to locked position.



NOTE

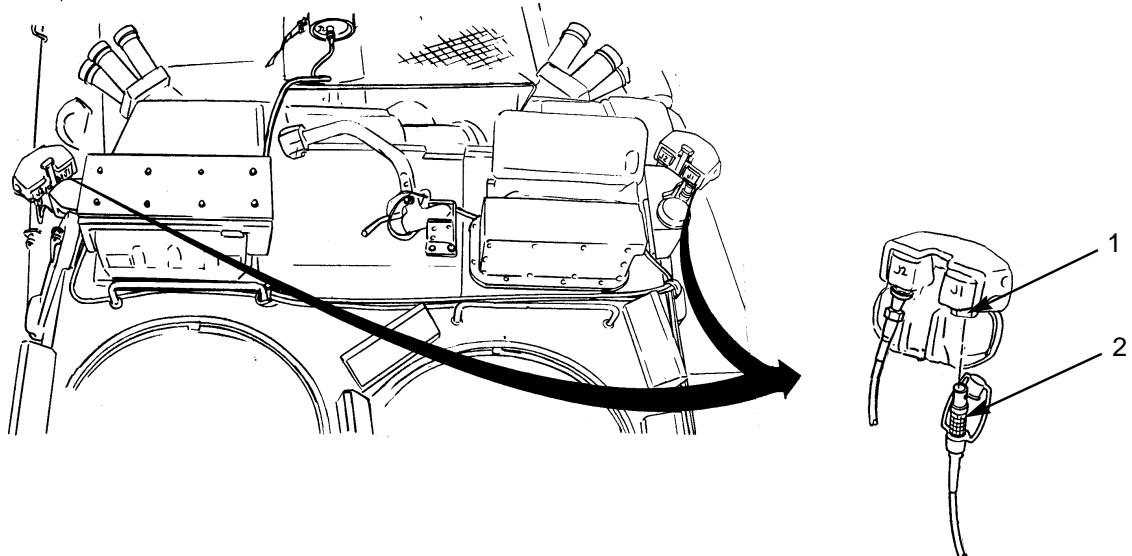
Perform steps 2 through 8 if installing right-front RDU/HDDU assembly.

2. Position exterior cables in slot (9) provided on right-front RDU/HDDU assembly bracket (8).
3. Push locking handle (11) down to locked position ensuring not to pinch cables in slot (9).

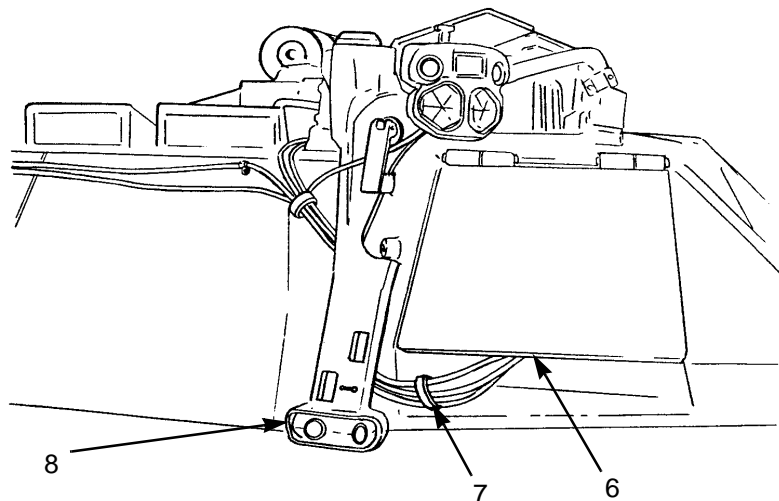


4-12. FRONT RETRO DETECTOR/HULL DEFILADE DETECTOR (RDU/HDDU) ASSEMBLY REPLACEMENT (Con't).

4. Connect W7 cable connector J1 (2) to RDU connector J1 (1).

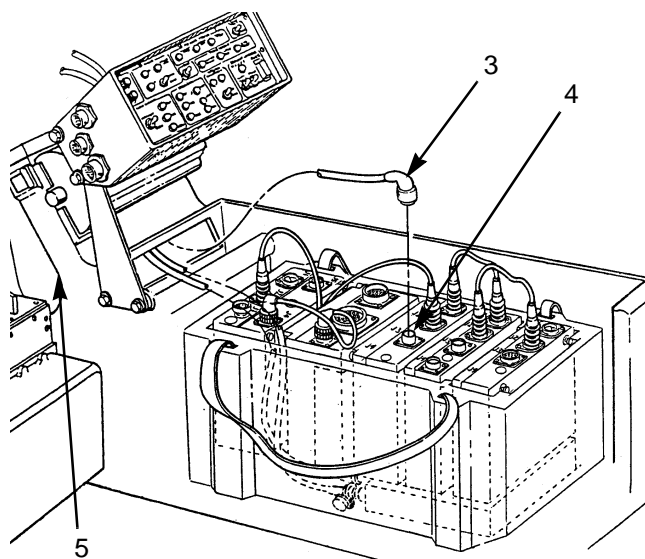


5. Feed RSI antenna cable to interior of turret through ammunition ejection port (6) and into HE ammunition box through ammunition feed port (5). At commander's DIM36TH, secure cable with velcro strap.
6. Fasten velcro strap (7) to cable bundle between front of RDU/HDDU assembly bracket (8) and ammunition ejection port (6).



4-12. FRONT RETRO DETECTOR/HULL DEFILADE DETECTOR (RDU/HDDU) ASSEMBLY REPLACEMENT (Con't).

7. Connect RSI antenna cable connector (3) to RSI unit connector J3 (4).
8. Install HE ammunition box lid (see TM 08594A-10/1A).

**FOLLOW-ON TASKS:**

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-13. RSI ANTENNA ASSEMBLY REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

- Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.
- TURRET DRIVE LOCK must be in locked position before connecting or disconnecting system components/cables. Failure to follow this warning may result in injury or death to personnel.

NOTE

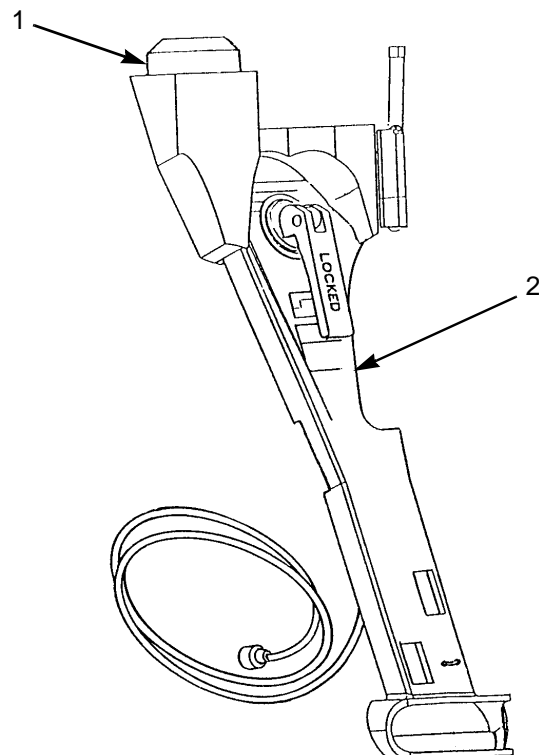
RSI antenna assembly is mounted on right-front retro detector/hull defilade detector bracket.

a. REMOVAL

1. Remove right-front retro detector/hull defilade detector assembly (see paragraph 4-12).
2. Remove retro detector unit (see paragraph 4-12).
3. Remove hull defilade detector unit (see paragraph 4-12).
4. Replace RSI antenna assembly (1) and mounting bracket (2) as a unit.

b. INSTALLATION

1. Install hull defilade detector unit (see paragraph 4-12).
2. Install retro detector unit (see paragraph 4-12).
3. Install right-front retro detector/hull defilade detector assembly (see paragraph 4-12).



4-13. RSI ANTENNA ASSEMBLY REPLACEMENT (Con't).

FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-14. REAR RETRO DETECTOR/HULL DEFILADE DETECTOR ASSEMBLY REPLACEMENT.

This Task Covers:

- | | |
|--|---|
| <ul style="list-style-type: none"> a. Rear Retro Detector/Hull Defilade Detector Assembly Removal b. Retro Detector Unit Replacement | <ul style="list-style-type: none"> c. Hull Defilade Detector Unit Replacement d. Rear Retro Detector/Hull Defilade Detector Assembly Installation |
|--|---|

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

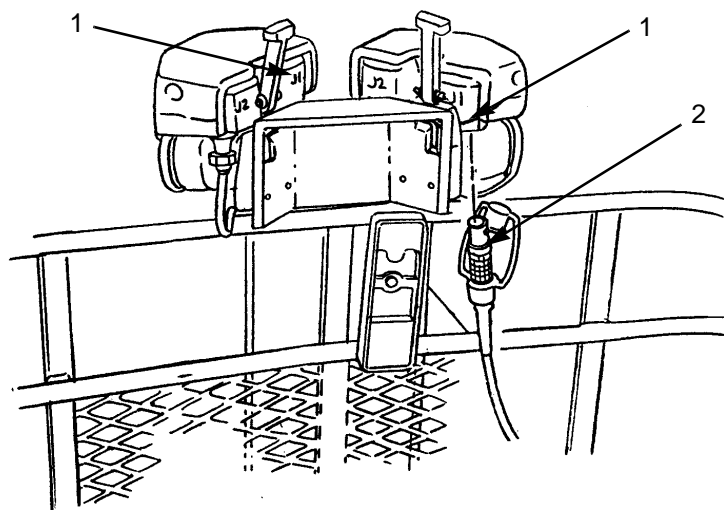
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

- Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.
- TURRET DRIVE LOCK must be in locked position before connecting or disconnecting system components/cables. Failure to follow this warning may result in injury or death to personnel.

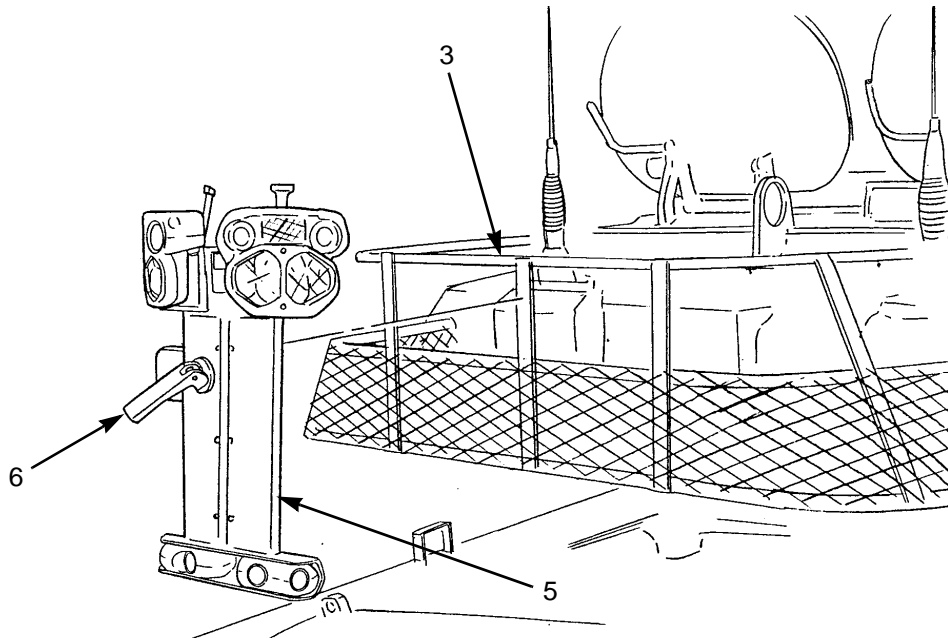
a. REAR RETRO DETECTOR/HULL DEFILADE DETECTOR ASSEMBLY REMOVAL

1. Disconnect W8 cable connectors J1 (2) from RDU connectors J1 (1).



4-14. REAR RETRO DETECTOR/HULL DEFILADE DETECTOR ASSEMBLY REPLACEMENT (Con't).

2. Lift locking handle (6) and remove RDU/HDDU assembly (5) from bustle rack (3).

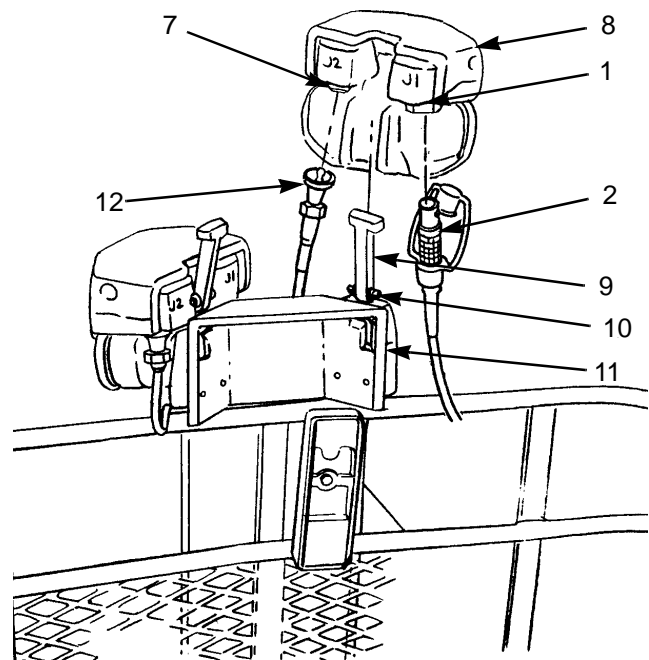


b. RETRO DETECTOR UNIT REPLACEMENT

NOTE

This step can be performed with assembly mounted to vehicle.

1. Disconnect W8 cable connector J1 (2) from RDU connector J1 (1).
2. Disconnect HDDU connector J2 (12) from RDU connector J2 (7).
3. Pull up on retaining strap (9) and release crosspin (10) from RDU (8).
4. Slide RDU (8) up off of mounting bracket (11).
5. Slide RDU (8) down onto mounting bracket (11).
6. Pull up on retaining strap (9) and secure crosspin (10) on RDU (8).
7. Connect HDDU connector J2 (12) to RDU connector J2 (7).
8. Connect W8 cable connector J1 (2) to RDU connector J1 (1).



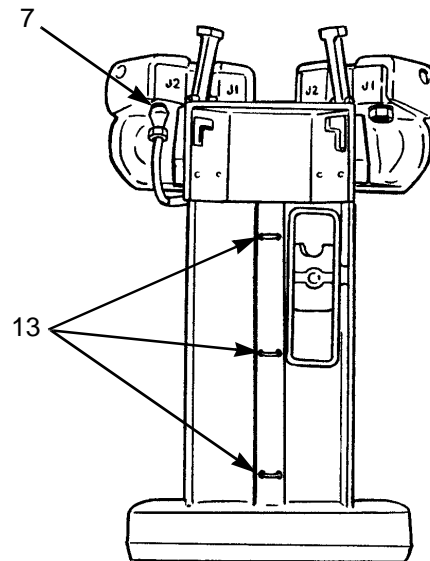
4-14. REAR RETRO DETECTOR/HULL DEFILADE DETECTOR ASSEMBLY REPLACEMENT (Con't).

c. HULL DEFILADE DETECTOR UNIT REPLACEMENT

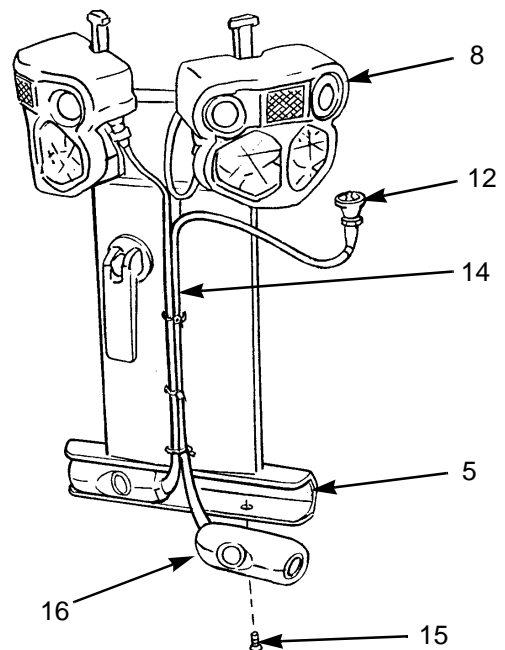
NOTE

This step must be performed with assembly removed from vehicle.

1. Disconnect HDDU connector J2 (12) from RDU connector J2 (7).
2. Remove tie wraps (13).



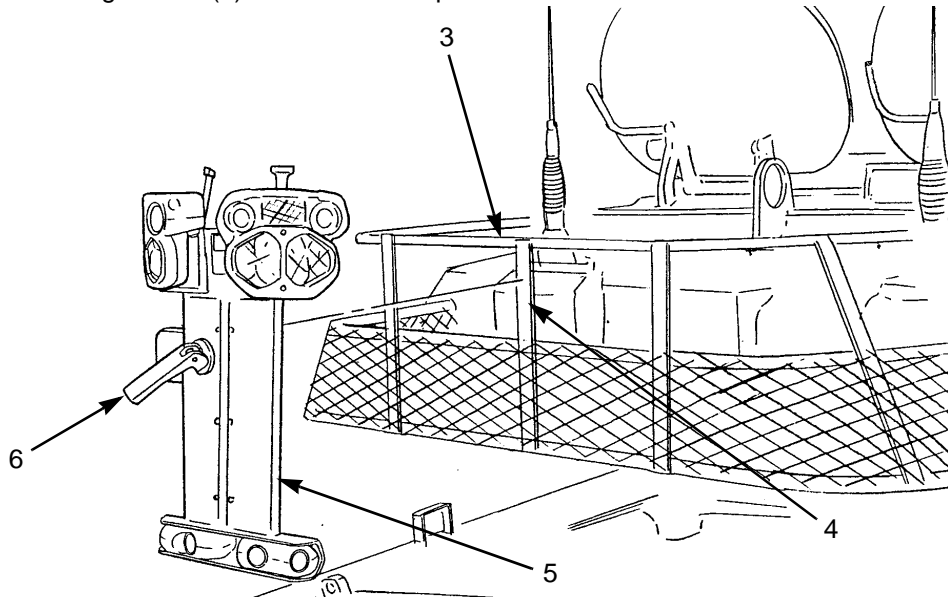
3. Remove screw (15) and HDDU (16) from assembly bracket (5).
4. Position HDDU (16) on assembly bracket (5) and secure with screw (15).
5. Route HDDU cable (14) along outside of assembly bracket (5) to RDU (8) and secure with tie wraps (13).
6. Connect HDDU connector J2 (12) to RDU connector J2 (7).



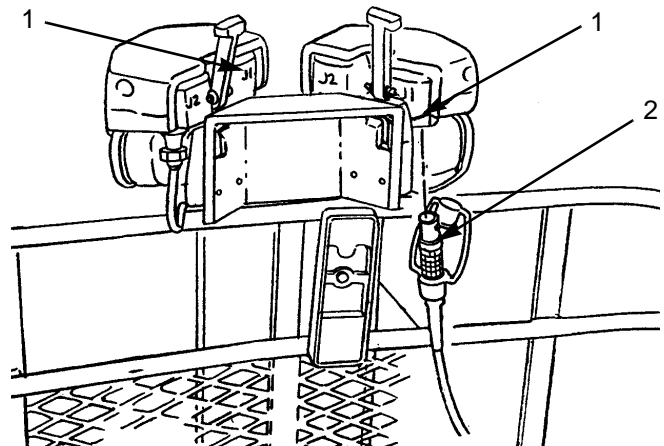
4-14. REAR RETRO DETECTOR/HULL DEFILADE DETECTOR ASSEMBLY REPLACEMENT (Con't).

d. REAR RETRO DETECTOR/HULL DEFILADE DETECTOR ASSEMBLY INSTALLATION

1. Lift locking handle (6) and position RDU/HDDU assembly bracket (5) on outside and left of center strut (4) on bustle rack (3).
2. Slide RDU/HDDU assembly bracket (5) to right until contact is made with center strut (4) on bustle rack (3).
3. Push locking handle (6) down to locked position.



4. Connect W8 cable connectors J1 (2) to RDU connectors J1 (1).



FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-15. TBOS GUNNER'S EYEPIECE UNIT REPLACEMENT.

This Task Covers:

- | | |
|------------|-----------------|
| a. Removal | b. Installation |
|------------|-----------------|

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

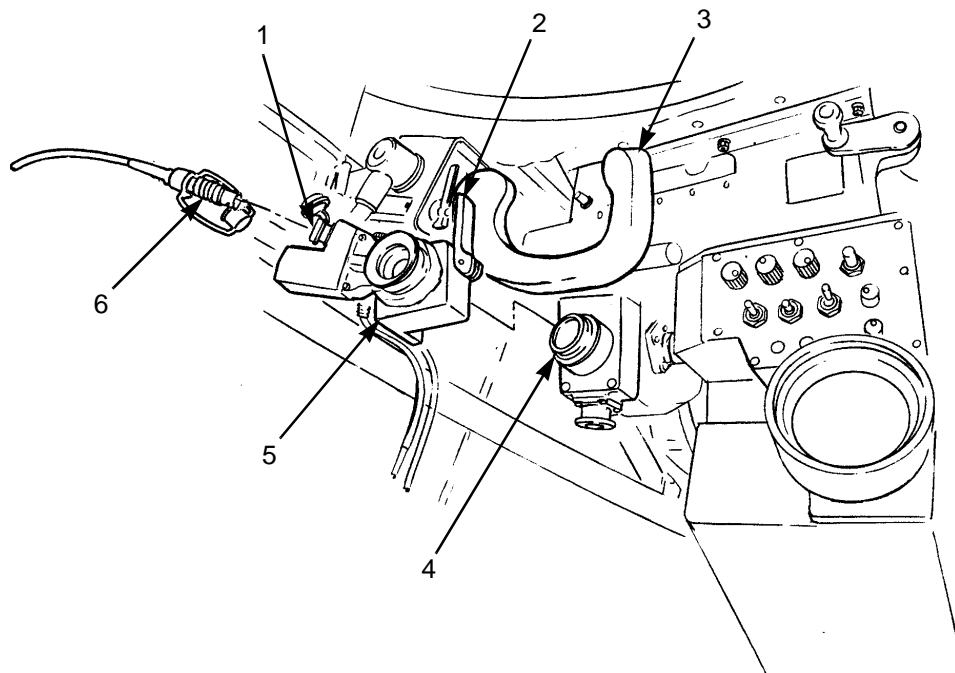
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

1. Raise gunner's browpad (3).
2. Lift locking lever (2) and remove TBOS gunner's eyepiece unit (5) from gunner's daysight (4).
3. Disconnect W9 cable connector J1 (6) from TBOS gunner's eyepiece unit connector J1 (1).



b. INSTALLATION

1. Connect W9 cable connector J1 (6) to TBOS gunner's eyepiece unit connector J1 (1).

4-15. TBOS GUNNER'S EYEPIECE UNIT REPLACEMENT (Con't).

2. Lift locking lever (2) and position TBOS gunner's eyepiece unit (5) with connector on left onto gunner's daysight (4).
3. Push locking lever (2) down to locked position.
4. Lower gunner's browpad (3).

FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).
- Perform alignment procedures (see paragraph 2-7).

4-16. TBOS COMMANDER'S EYEPiece UNIT REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

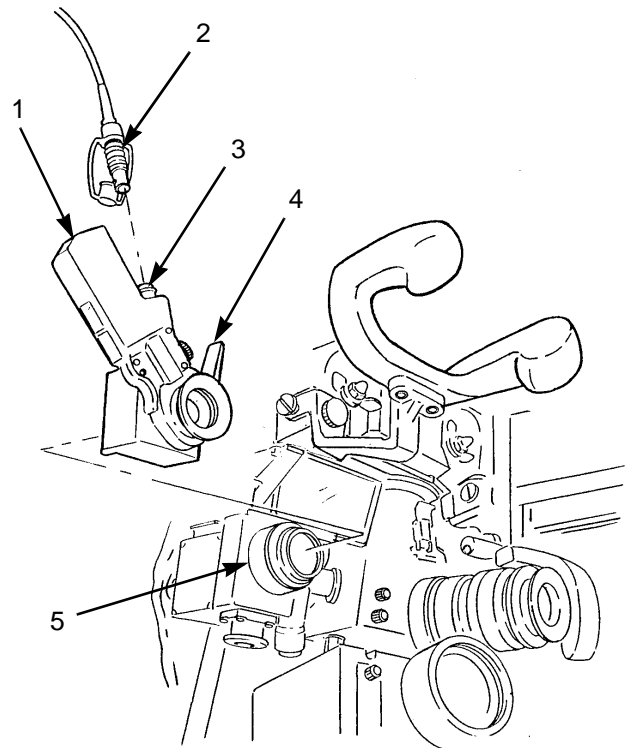
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

1. Lift locking lever (4) and remove TBOS commander's eyepiece unit (1) from commander's daysight (5).
2. Disconnect W10 cable connector J1 (2) from TBOS commander's eyepiece unit connector J1 (3).



4-16. TBOS COMMANDER'S EYEPiece UNIT REPLACEMENT (Con't).

b. INSTALLATION

1. Connect W10 cable connector J1 (2) to TBOS commander's eyepiece unit connector J1 (3).
2. Lift locking lever (4) and position TBOS commander's eyepiece unit (1) with connector on left onto commander's daysight (5).
3. Push locking lever (4) down to locked position.

FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).
- Perform alignment procedures (see paragraph 2-7).

4-17. COMMANDER'S BROWPAD REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

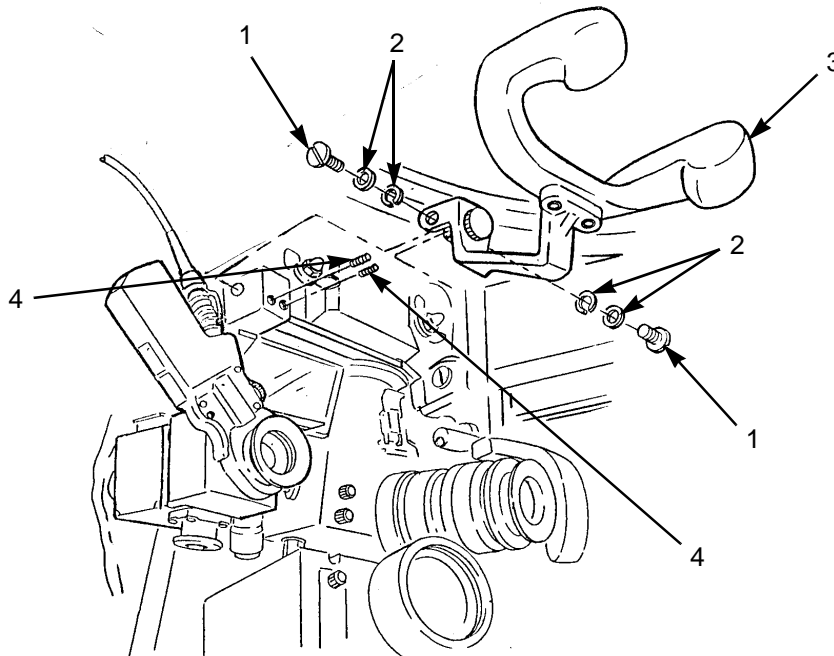
Initial Setup:

Tools/Test Equipment:

- Tool assembly (in PGS storage case)

a. REMOVAL

1. Using tool assembly, loosen two setscrews (4).
2. Using tool assembly, remove two screws (1), four washers (2), and commander's replacement browpad (3).



b. INSTALLATION

1. Using tool assembly, install commander's replacement browpad (3) and secure with two screws (1) and four washers (2).
2. Using tool assembly, tighten two setscrews (4).

4-18. TRACER, BURST, OBSCURATION SIMULATOR (TBOS) DRIVER UNIT REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

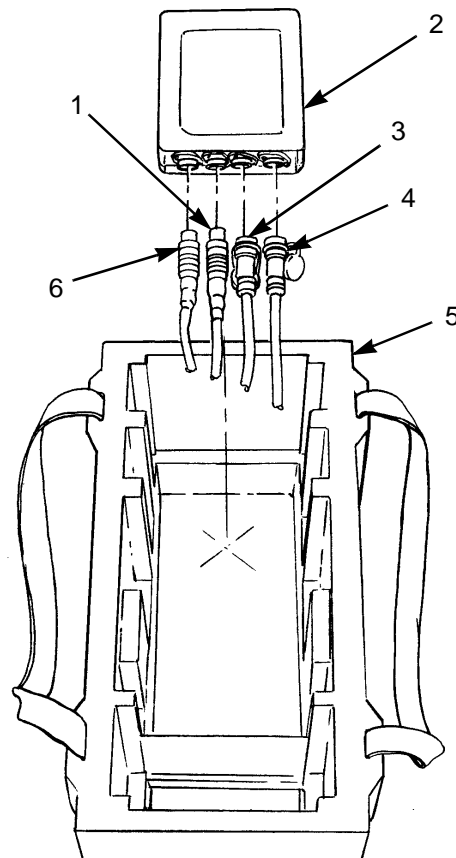
a. REMOVAL

1. Remove HE ammunition box lid (see TM 08594A-10/1A).

NOTE

Align units as removed to ease installation.

2. Remove TBOS video mixer (see paragraph 4-22).
3. Remove target computer unit (see paragraph 4-23).
4. Remove RSI unit (see paragraph 4-21).
5. Remove expansion unit (see paragraph 4-19).
6. Remove vehicle interface unit (see paragraph 4-20).
7. Remove TBOS driver unit (2) from vehicle interface assembly bracket (5).
8. Disconnect W4 cable connector J1 (6), W5 cable connector J2 (1), W9 cable connector J3 (3), and W10 cable connector J4 (4) from TBOS driver unit (2).



4-18. TRACER, BURST, OBSCURATION SIMULATOR (TBOS) DRIVER UNIT REPLACEMENT (Con't).

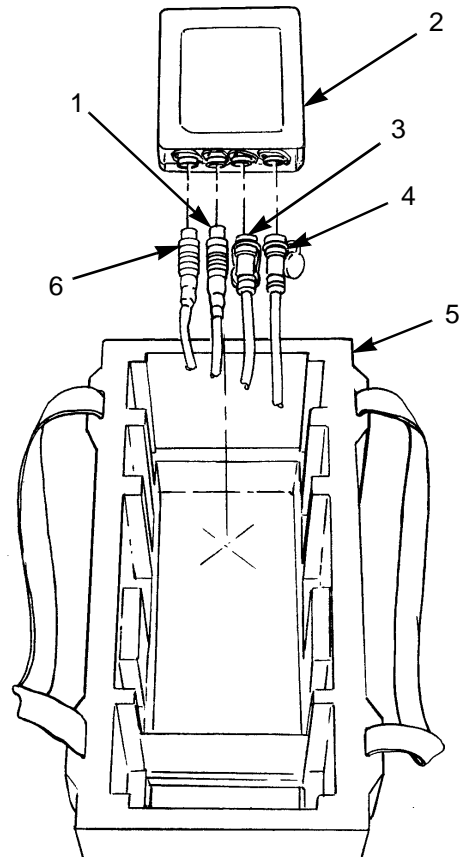
b. INSTALLATION

1. Connect W4 cable connector J1 (6), W5 cable connector J2 (1), W9 cable connector J3 (3), and W10 cable connector J4 (4) to TBOS driver unit (2).
2. Install TBOS driver unit (2) into vehicle interface bracket (5).
3. Install vehicle interface unit (see paragraph 4-20).
4. Install expansion unit (see paragraph 4-19).
5. Install RSI unit (see paragraph 4-21).
6. Install target computer unit (see paragraph 4-23).
7. Install TBOS video mixer (see paragraph 4-22).

NOTE

Cables connected to TBOS driver unit should be exiting vehicle interface bracket between vehicle interface unit and expansion unit.

8. Install HE ammunition box lid (see TM 08594A-10/1A).



FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).
- Perform alignment procedures (see paragraph 2-7).

4-19. EXPANSION UNIT REPLACEMENT.

This Task Covers:

- a. Removal

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

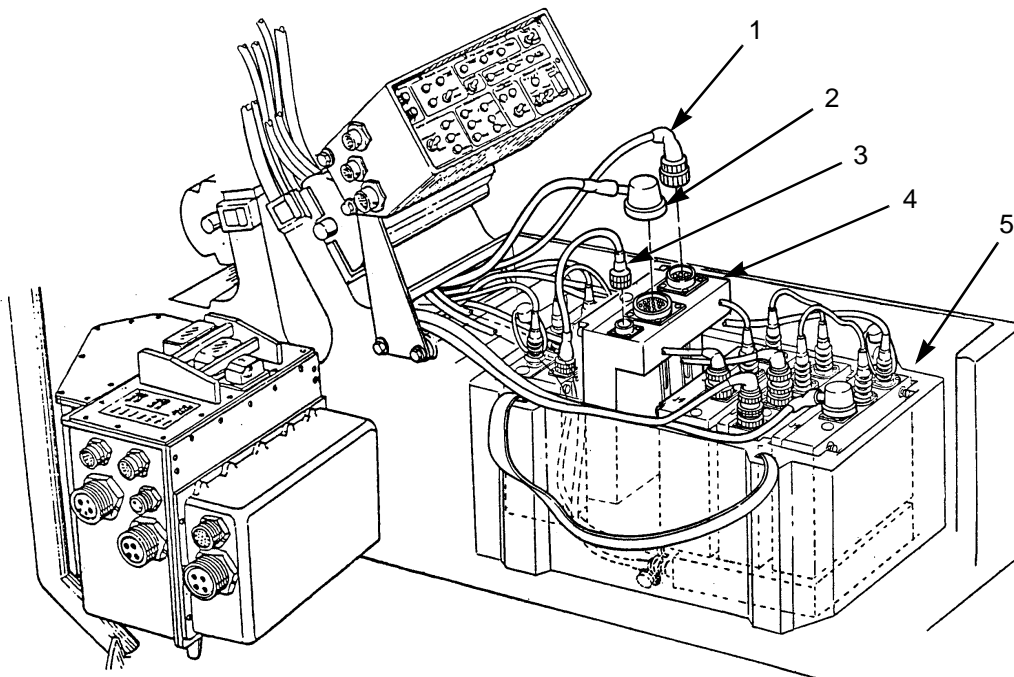
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

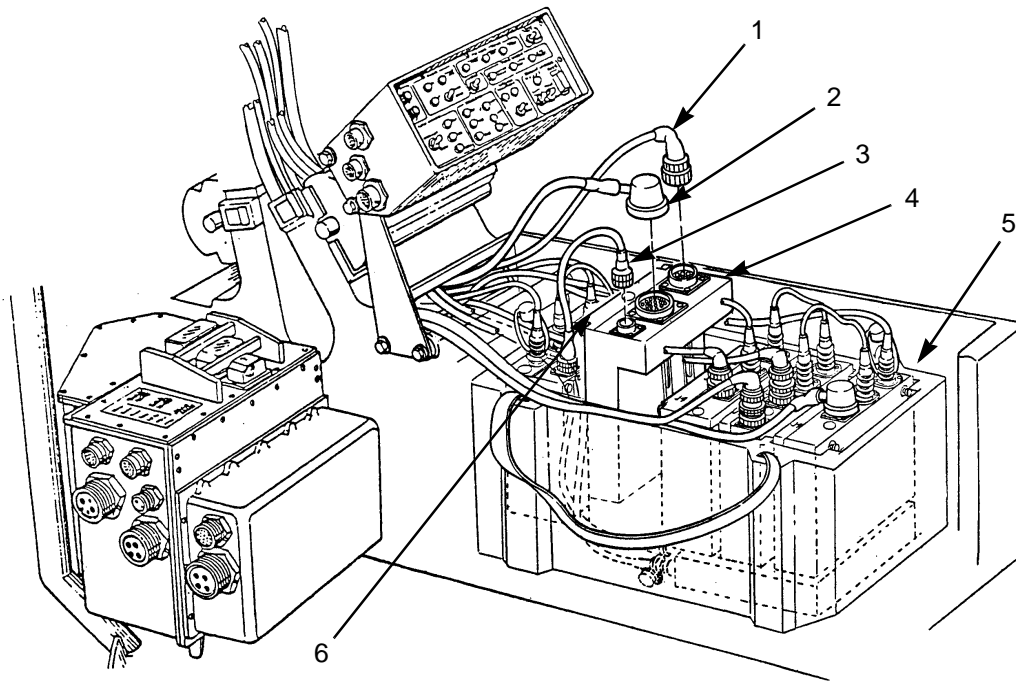
1. Remove HE ammunition box lid (see TM 08594A-10/1A).
2. Disconnect W13 cable connector J3 (1), W14 cable connector J2 (2), and W6 cable connector J1 (3) from expansion unit (4).
3. Remove expansion unit (4) from vehicle interface bracket assembly (5).



4-19. EXPANSION UNIT REPLACEMENT (Con't).

b. INSTALLATION

1. Install expansion unit (4) with silver mounting pads (6) forward in vehicle interface bracket assembly (5).
2. Connect W13 cable connector J3 (1), W14 cable connector J2 (2), and W6 cable connector J1 (3) to expansion unit (4).
3. Install HE ammunition box lid (see TM 08594A-10/1A).



FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-20. VEHICLE INTERFACE UNIT REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

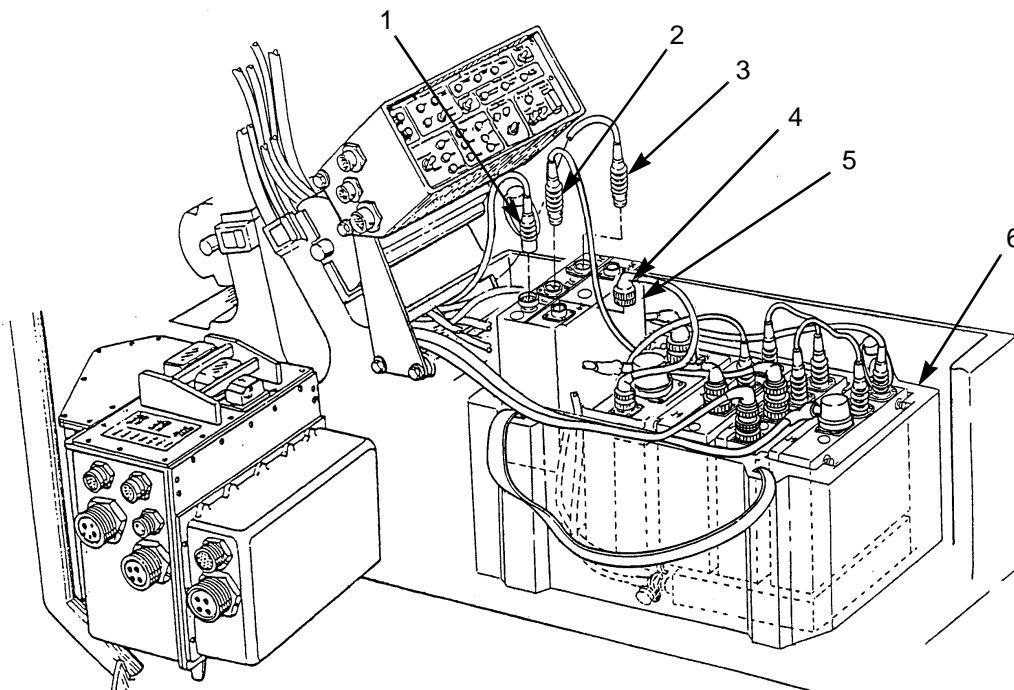
- TM 08594A-10/1A
 - TM 08594A-10/2
-

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

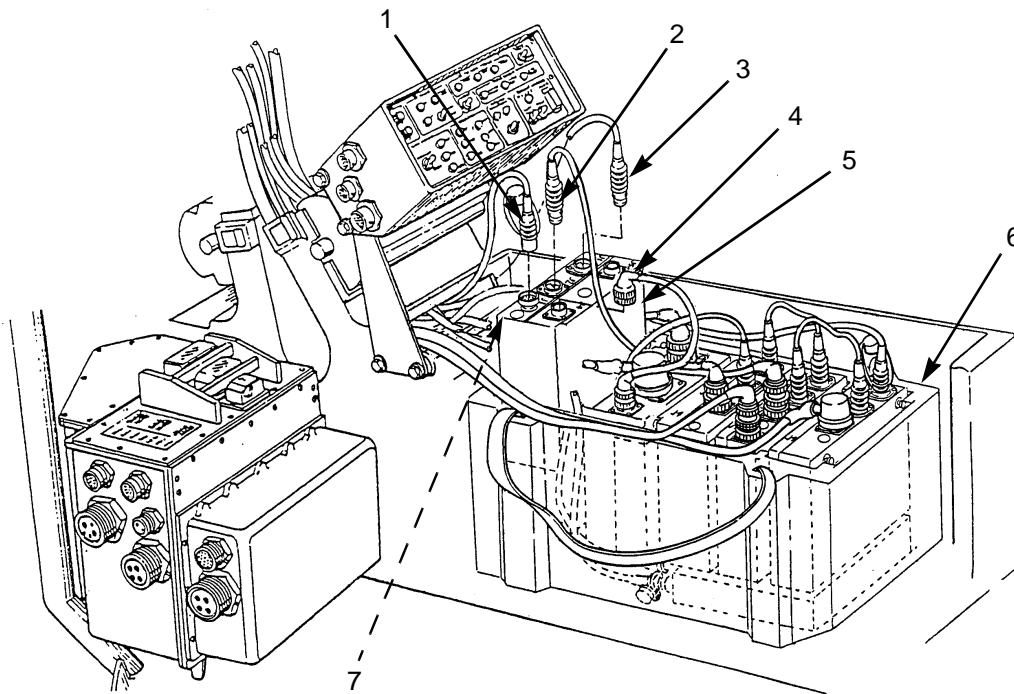
1. Remove HE ammunition box lid (see TM 08594A-10/1A).
2. Disconnect control panel cable connector J1 (3), W5 cable connector J2 (2), W12 cable connector J3 (1), and W6 cable connector J4 (4) from vehicle interface unit (5).
3. Remove vehicle interface unit (5) from vehicle interface bracket assembly (6).



4-20. VEHICLE INTERFACE UNIT REPLACEMENT (Con't).

b. INSTALLATION

1. Install vehicle interface unit (5) with silver mounting pads (7) forward in vehicle interface bracket assembly (6).
2. Connect control panel cable connector J1 (3), W5 cable connector J2 (2), W12 cable connector J3 (1), and W6 cable connector J4 (4) to vehicle interface unit (5).
3. Install HE ammunition box lid (see TM 08594A-10/1A).



FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).
- Perform alignment procedures (see paragraph 2-7).

4-21. REMOTE SYSTEM INTERFACE (RSI) UNIT REPLACEMENT.

This Task Covers:

- a. Removal

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

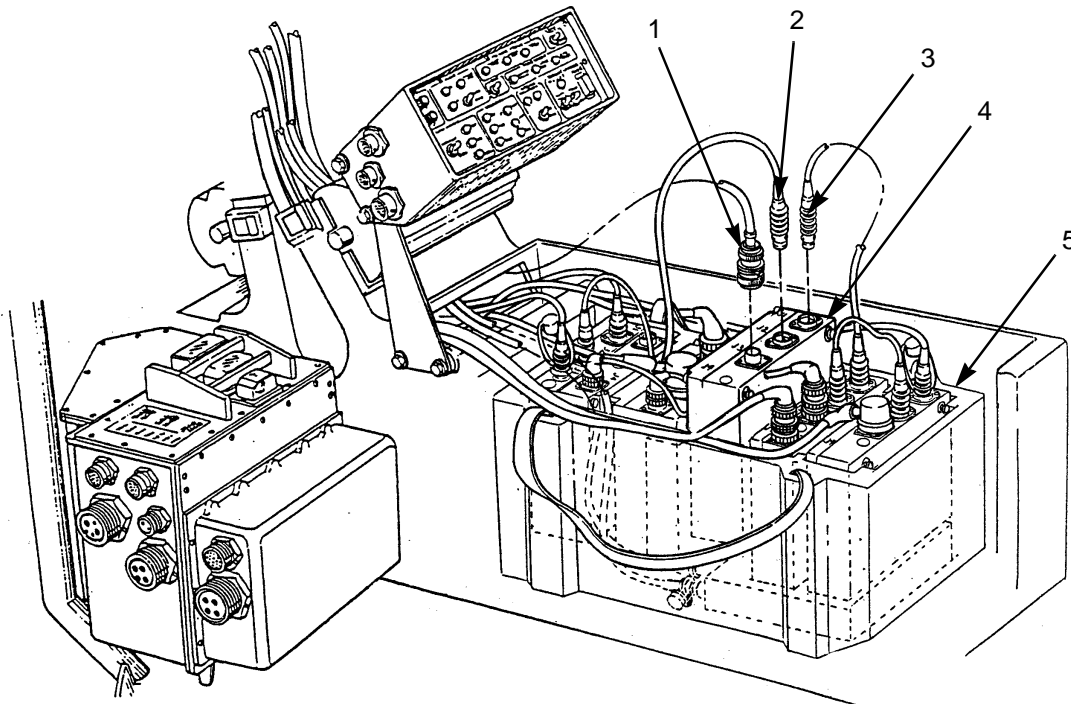
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

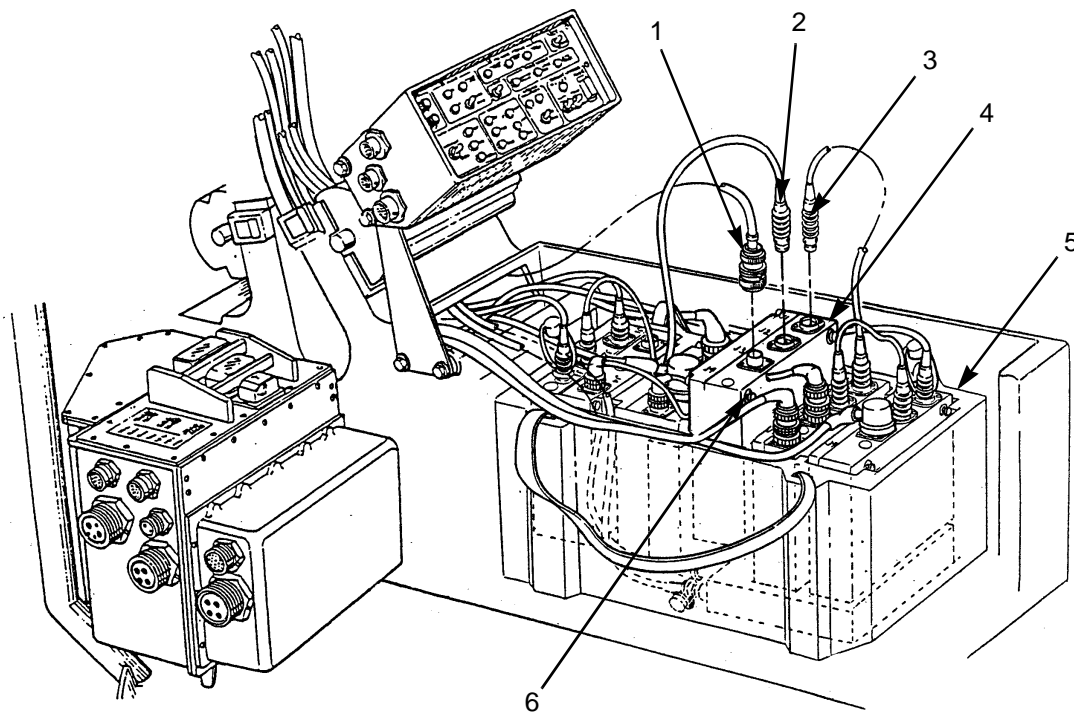
1. Remove HE ammunition box lid (see TM 08594A-10/1A).
2. Disconnect W3 cable connector J1 (3), W4 cable connector J2 (2), and RSI antenna cable connector J3 (1) from RSI unit (4).
3. Remove RSI unit (4) from vehicle interface bracket assembly (5).



4-21. REMOTE SYSTEM INTERFACE (RSI) UNIT REPLACEMENT (Con't).

b. INSTALLATION

1. Install RSI unit (4) with silver mounting pads (6) rearward in vehicle interface bracket assembly (5).
2. Connect W3 cable connector J1 (3), W4 cable connector J2 (2), and RSI antenna cable connector J3 (1) to RSI unit (4).
3. Install HE ammunition box lid (see TM 08594A-10/1A).



FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-22. TBOS VIDEO MIXER REPLACEMENT.

This Task Covers:

- a. Removal

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

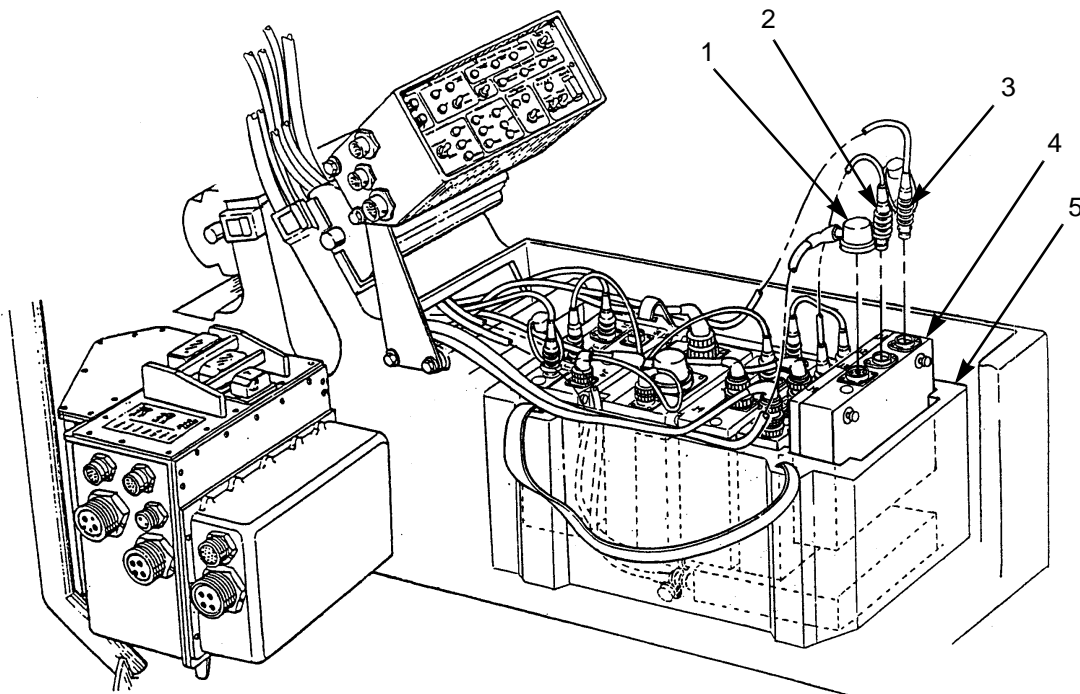
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

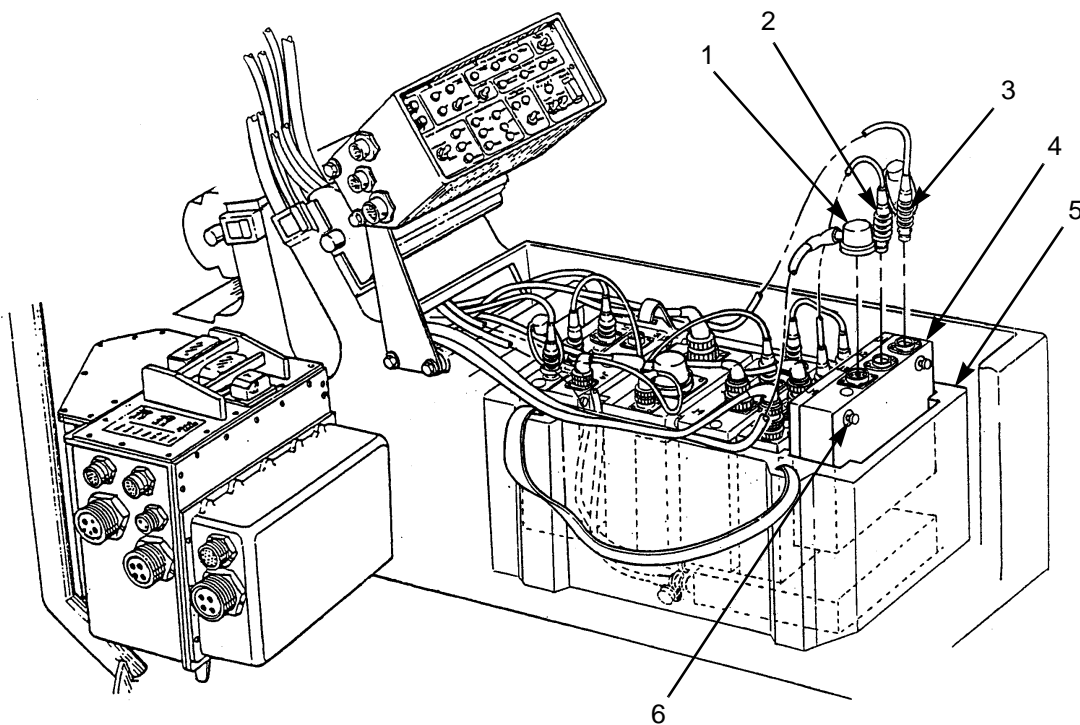
1. Remove HE ammunition box lid (see TM 08594A-10/1A).
2. Disconnect W1 cable connector J1 (3), W2 cable connector J2 (2), and W11 cable connector J3 (1) from TBOS video mixer (4).
3. Remove TBOS video mixer (4) from vehicle interface bracket assembly (5).



4-22. TBOS VIDEO MIXER REPLACEMENT (Con't).

b. INSTALLATION

1. Install TBOS video mixer (4) with silver mounting pads (6) rearward in vehicle interface bracket assembly (5).
2. Connect W1 cable connector J1 (3), W2 cable connector J2 (2), and W11 cable connector J3 (1) to TBOS video mixer (4).
3. Install HE ammunition box lid (see TM 08594A-10/1A).



FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-23. TARGET COMPUTER UNIT REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

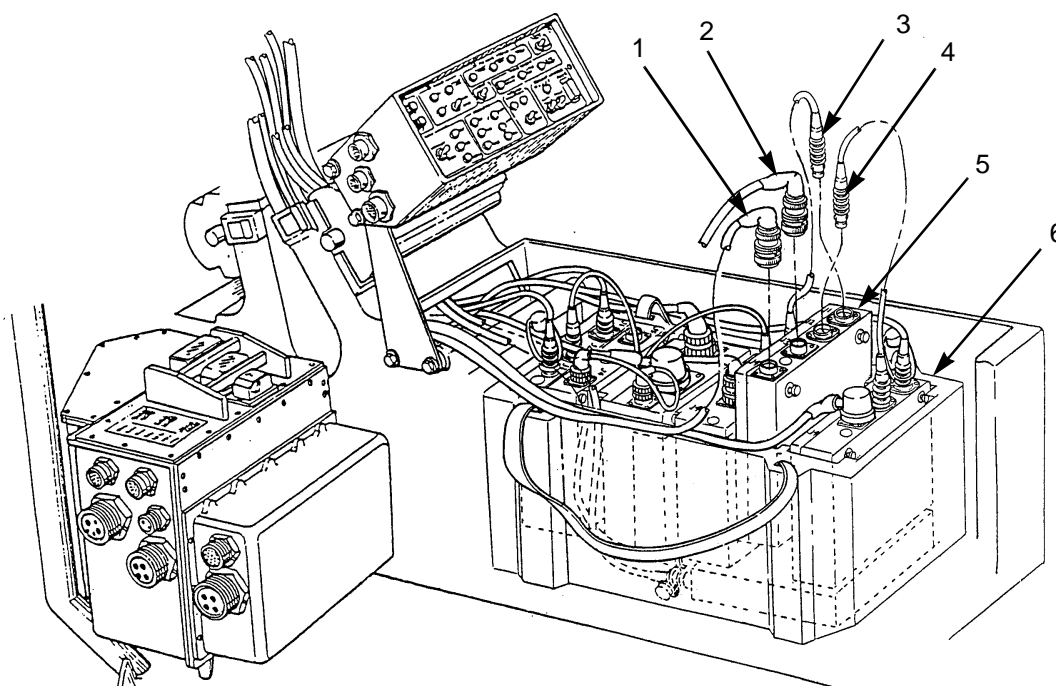
- TM 08594A-10/1A
 - TM 08594A-10/2
-

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

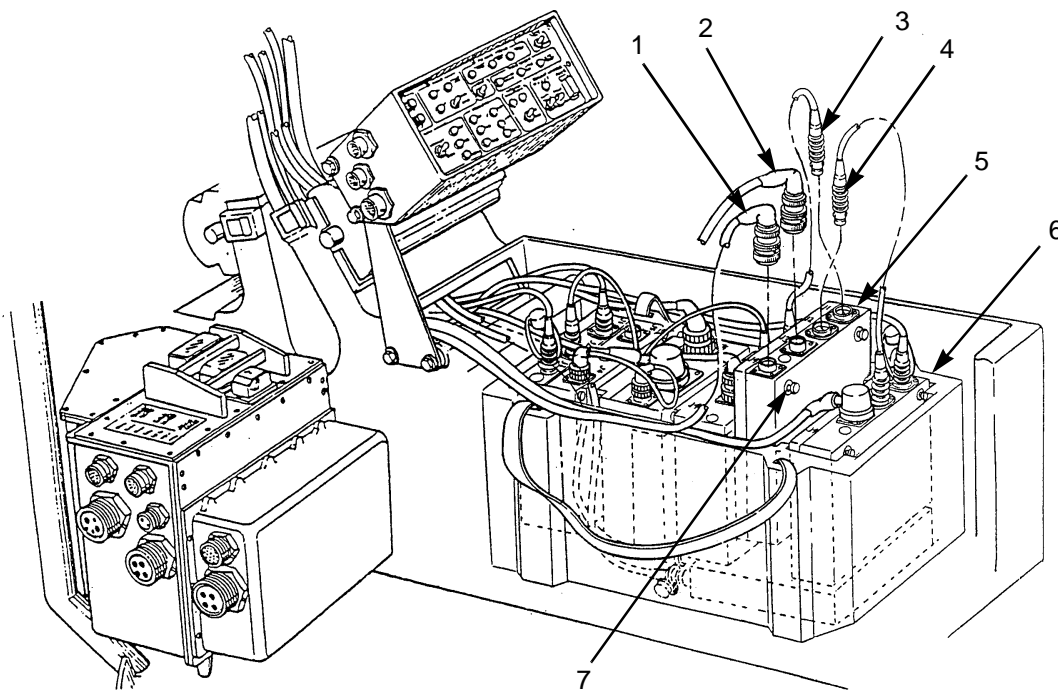
1. Remove HE ammunition box lid (see TM 08594A-10/1A).
2. Disconnect W3 cable connector J1 (3), W2 cable connector J2 (4), W7 cable connector J3 (2), and W8 cable connector J4 (1) from target computer unit (5).
3. Remove target computer unit (5) from vehicle interface bracket assembly (6).



4-23. TARGET COMPUTER UNIT REPLACEMENT (Con't).

b. INSTALLATION

1. Install target computer unit (5) with silver mounting pads (7) rearward in vehicle interface bracket assembly (6).
2. Connect W3 cable connector J1 (3), W2 cable connector J2 (4), W7 cable connector J3 (2), and W8 cable connector J4 (1) to target computer unit (5).
3. Install HE ammunition box lid (see TM 08594A-10/1A).



FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).
- Perform alignment procedures (see paragraph 2-7).

4-24. CONTROL PANEL REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

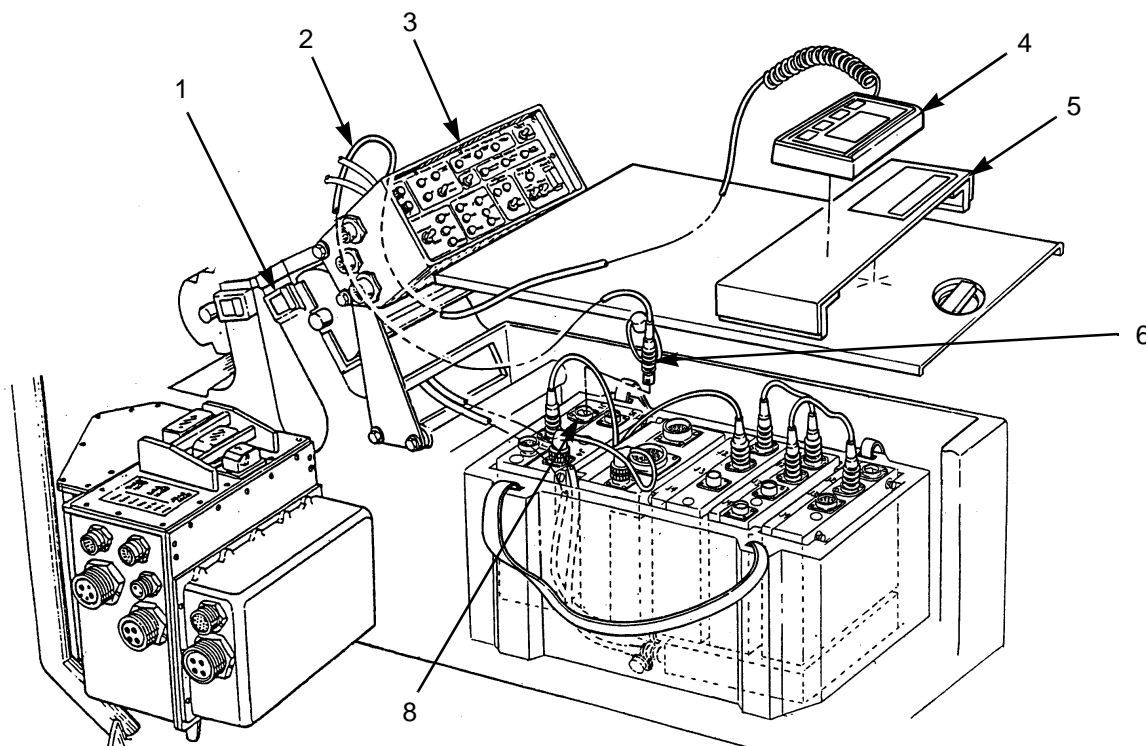
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

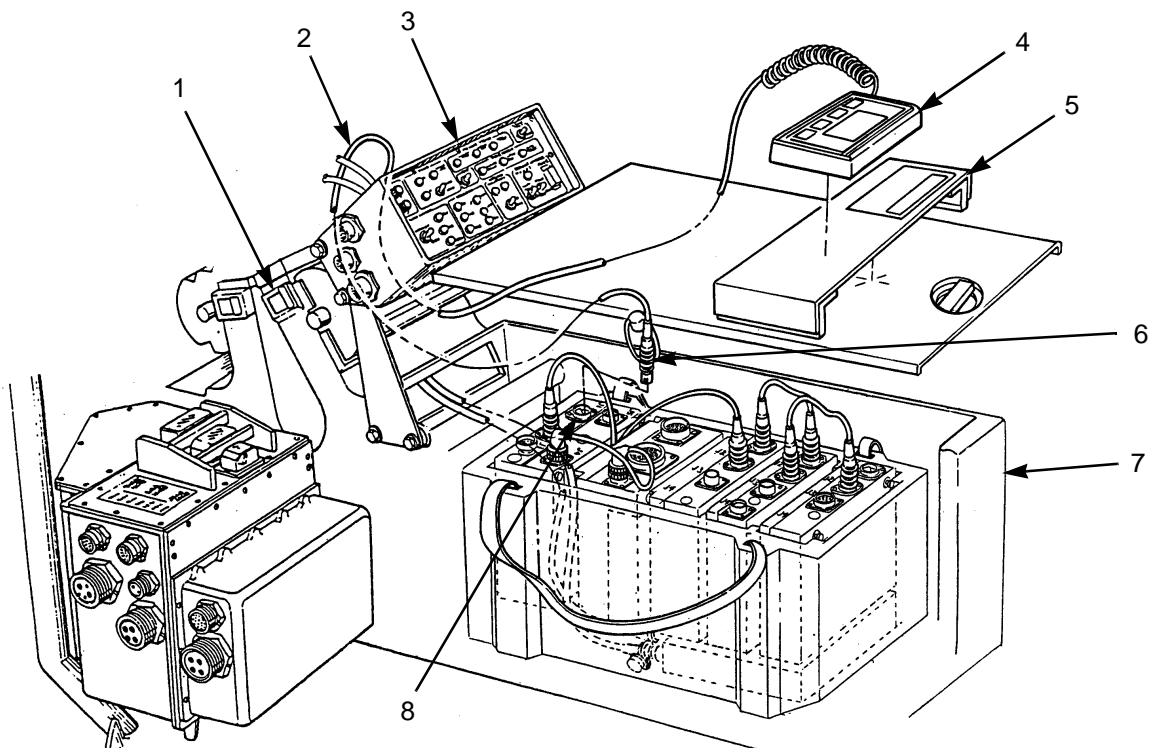
1. Remove control panel (4) from mounting bracket (5).
2. Remove HE ammunition box lid (see TM 08594A-10/1A).
3. Disconnect control panel cable connector J1 (6) from vehicle interface unit connector J1 (8).
4. Feed control panel cable (2) up through ammunition feed port (1) and down through space between CDA (3) and ammunition feed port (1).



4-24. CONTROL PANEL REPLACEMENT (Con't).

b. INSTALLATION

1. Feed control panel cable (2) up through space between CDA (3) and ammunition feed port (1) then down ammunition feed port into HE ammunition box (7).
2. Connect control panel cable connector J1 (6) to vehicle interface unit connector J1 (8).
3. Install HE ammunition box lid (see TM 08594A-10/1A).
4. Install control panel (4) on mounting bracket (5).



FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-25. SHORTING PLUG REPLACEMENT.

This Task Covers:

- | | |
|------------|-----------------|
| a. Removal | b. Installation |
|------------|-----------------|

Initial Setup:

Equipment Conditions:

- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

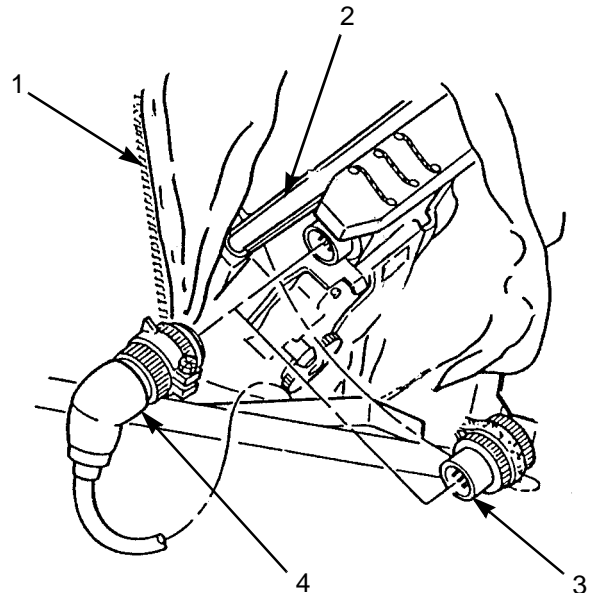
Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

1. Unzip weapons enclosure bag (1).
2. Press feeder handle latch (2) and pull feed handle to the up and locked position.
3. Disconnect shorting plug (3) from 25 mm gun power cable (4).

b. INSTALLATION

1. Connect shorting plug (3) to 25 mm gun power cable (4).
2. Push feeder handle latch (2) to the down position.
3. Zip weapons enclosure bag (1).



FOLLOW-ON TASKS:

- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-26. W1 CABLE REPLACEMENT.

This Task Covers:

- | | |
|------------|-----------------|
| a. Removal | b. Installation |
|------------|-----------------|

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

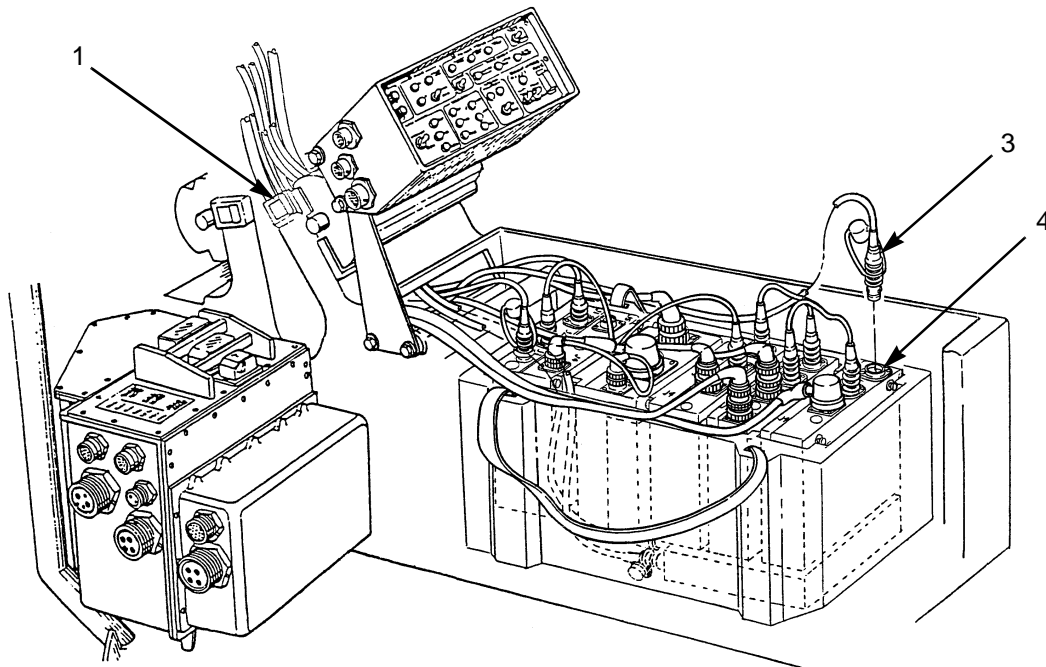
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

- Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.
- TURRET DRIVE LOCK must be in locked position before connecting or disconnecting system components/cables. Failure to follow this warning may result in injury or death to personnel.

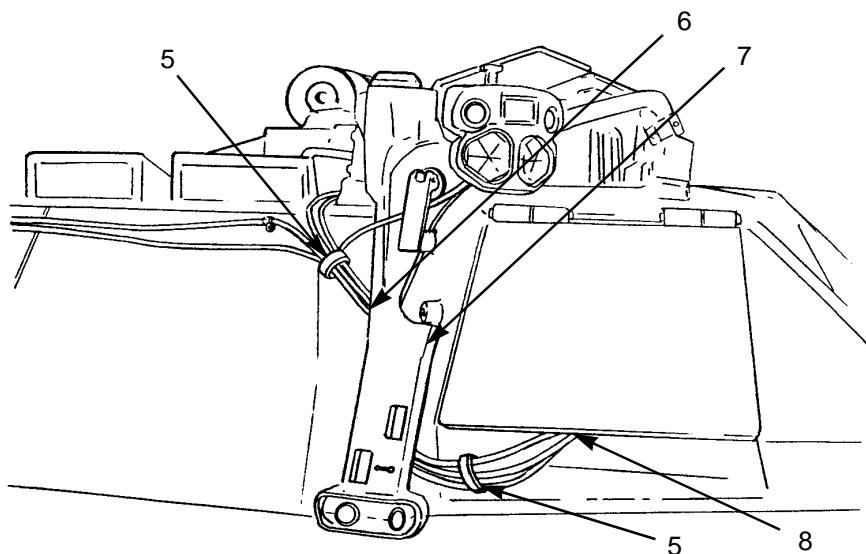
a. REMOVAL

1. Disconnect W1 cable connector J1 (3) from TBOS video mixer connector J1 (4) and feed cable through ammunition feed port (1). Unfasten velcro strap at commander's DIM36TH.

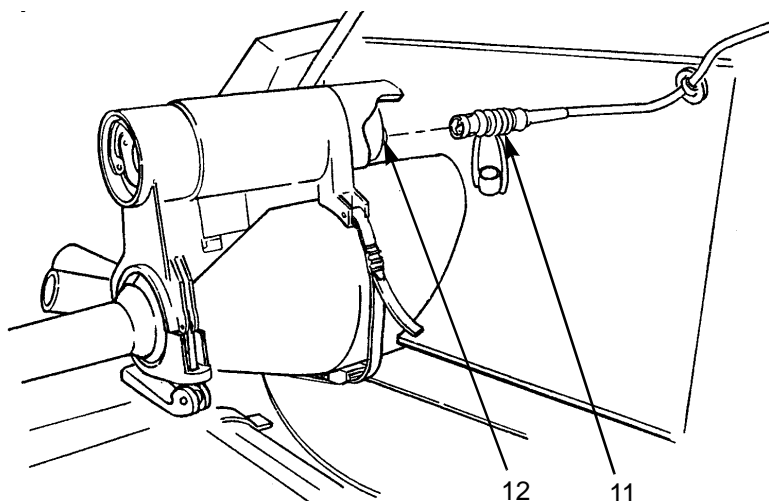


4-26. W1 CABLE REPLACEMENT (Con't).

2. Feed cable to exterior of turret through ammunition ejection port (8).
3. Unfasten velcro straps (5) releasing W1 cable from cable bundle.
4. Unlock, but do not remove, right-front RDU/HDDU assembly bracket (7).
5. Remove W1 cable from routing slot (6) on right-front RDU/HDDU bracket (7).

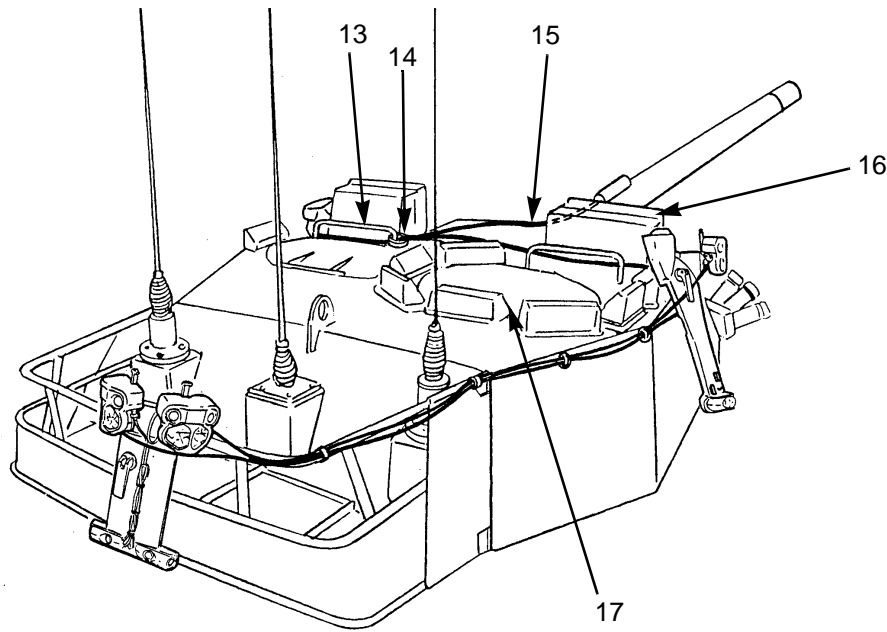


6. Disconnect W1 cable connector J2 (11) from transceiver unit connector J2 (12).



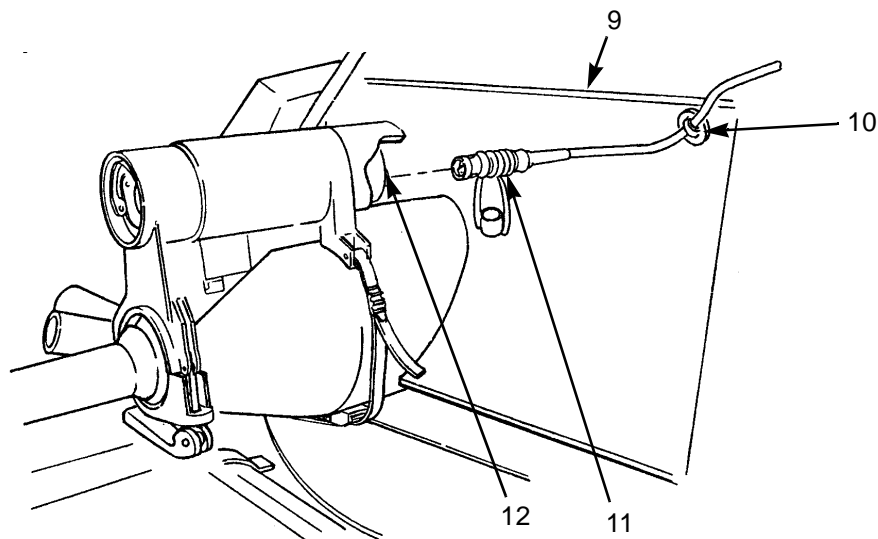
4-26. W1 CABLE REPLACEMENT (Con't).

7. Release velcro strap (14) from gunner's handhold (13) and magnet (10) from top left corner of gun ballistic shield (9).



b. INSTALLATION

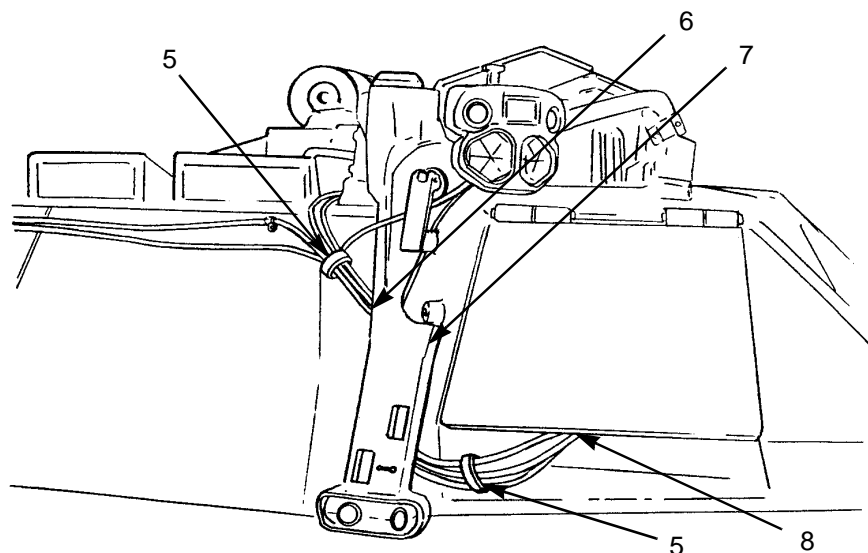
1. Connect W1 cable connector J2 (11) to rear transceiver unit J2 connector (12).
2. Fasten magnet (10) to top left corner of gun ballistic shield (9).



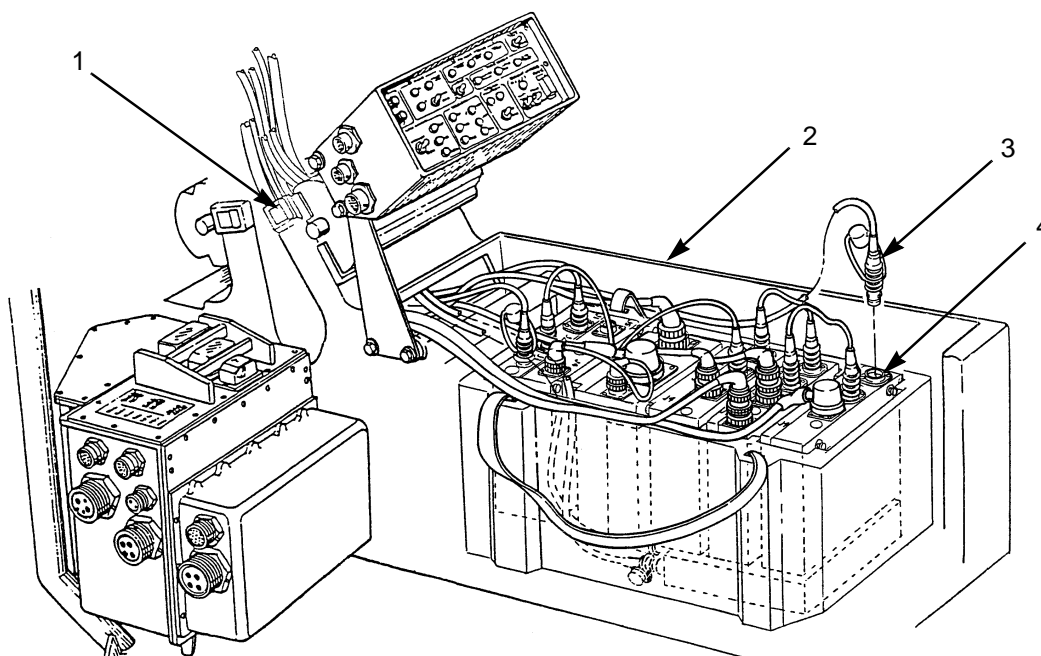
3. Route W1 cable (15) rearward to front center of turret.
4. At center of turret, fasten W1 cable to gunner's handhold (13) with velcro strap (14).

4-26. W1 CABLE REPLACEMENT (Con't).

5. Route W1 cable (15) to right between commander's hatch (17) and sight (16) and through slot (6) provided on right-front RDU/HDDU bracket (7).
6. Lock right-front RDU/HDDU bracket (7) ensuring not to pinch cables in slot (6).
7. Feed W1 cable to interior of turret through ammunition ejection port (8).



8. Feed W1 cable through ammunition feed port (1) into HE ammunition box (2).
9. At commander's DIM36TH, secure cable with velcro strap. Connect W1 cable connector J1 (3) to TBOS video mixer connector J1 (4).



10. Secure W1 cable to cable bundle with velcro straps (5).

4-26. W1 CABLE REPLACEMENT (Con't).

FOLLOW-ON TASKS:

- HE ammunition box lid installed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-27. W2 CABLE REPLACEMENT.

This Task Covers:

- a. Removal

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A)

References:

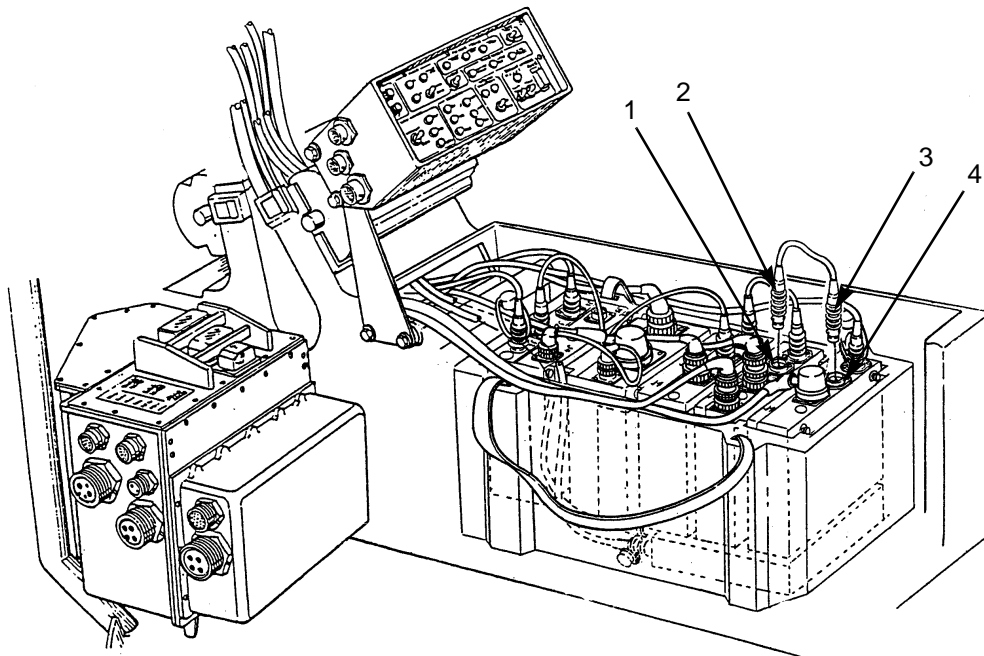
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

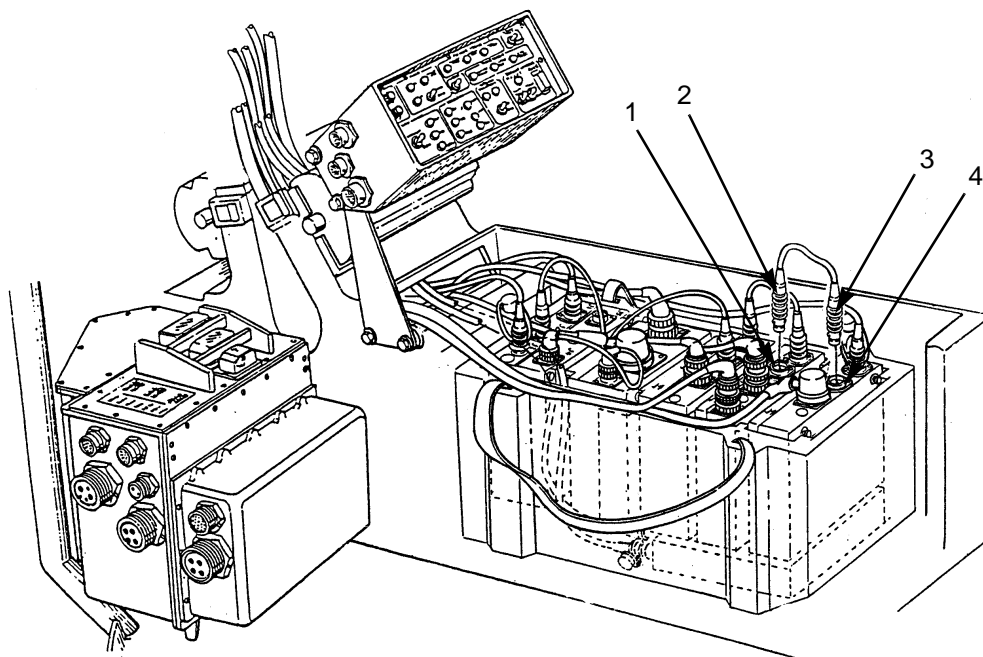
1. Disconnect W2 cable connector J2 (2) from target computer unit connector J2 (1).
2. Disconnect W2 cable connector J2 (3) from TBOS video mixer connector J2 (4).



4-27. W2 CABLE REPLACEMENT (Con't).

b. INSTALLATION

1. Connect W2 cable connector J2 (2) to target computer unit connector J2 (1).
2. Connect W2 cable connector J2 (3) to TBOS video mixer connector J2 (4).



FOLLOW-ON TASKS:

- HE ammunition box lid installed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-28. W3 CABLE REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

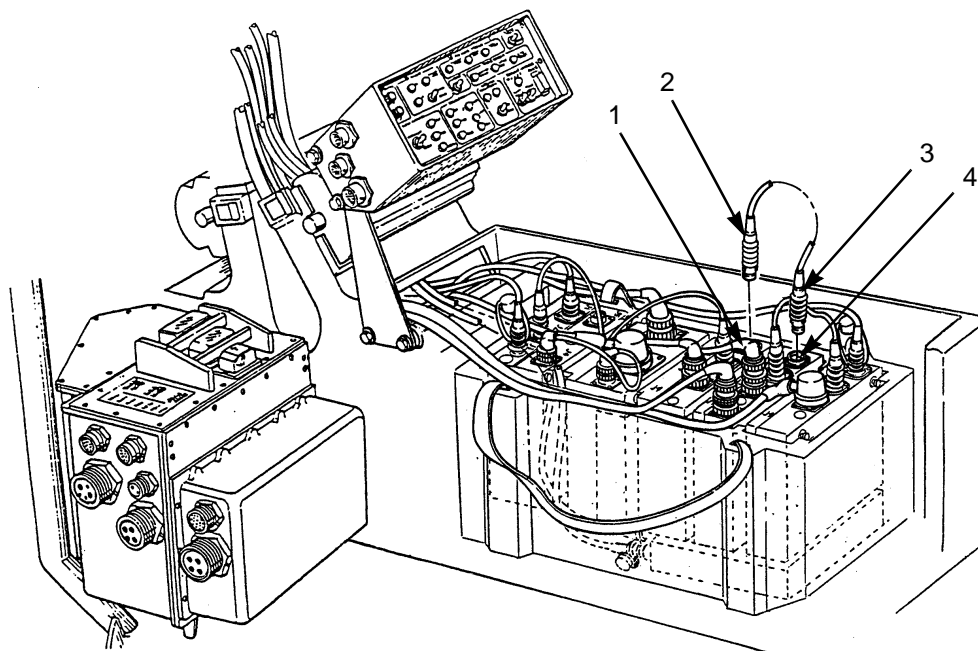
- TM 08594A-10/1A
 - TM 08594A-10/2
-

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

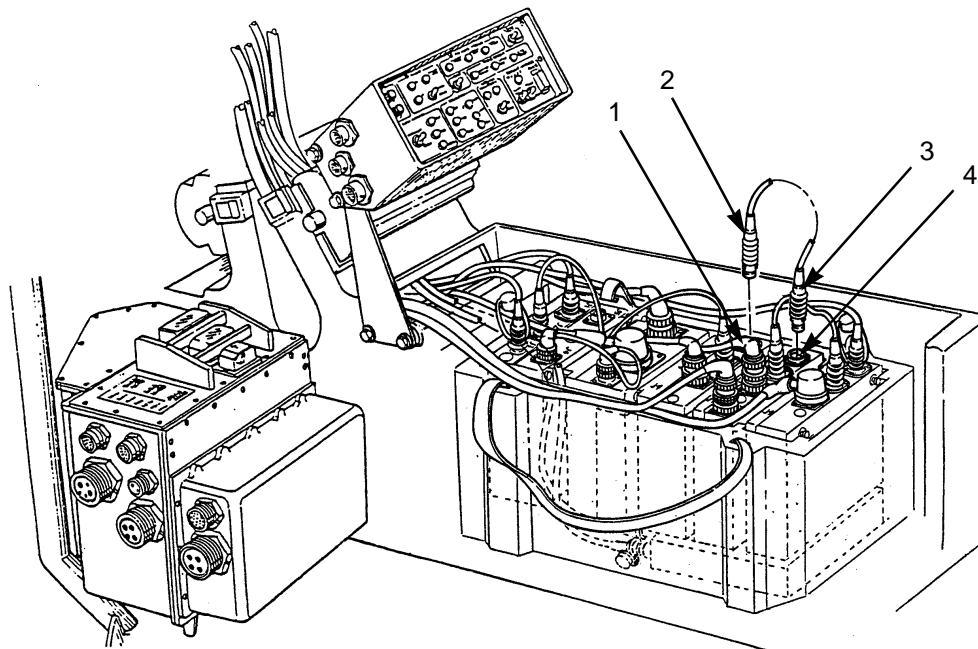
1. Disconnect W3 cable connector J1 (3) from target computer unit connector J1 (4).
2. Disconnect W3 cable connector J1 (2) from RSI connector J1 (1).



4-28. W3 CABLE REPLACEMENT (Con't).

b. INSTALLATION

1. Connect W3 cable connector J1 (2) to RSI connector J1 (1).
2. Connect W3 cable connector J1 (3) to target computer unit connector J1 (4).



FOLLOW-ON TASKS:

- HE ammunition box lid installed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

b. Installation

- TM 08594A-10/1A
- TM 08594A-10/2

4-30. W5 CABLE REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

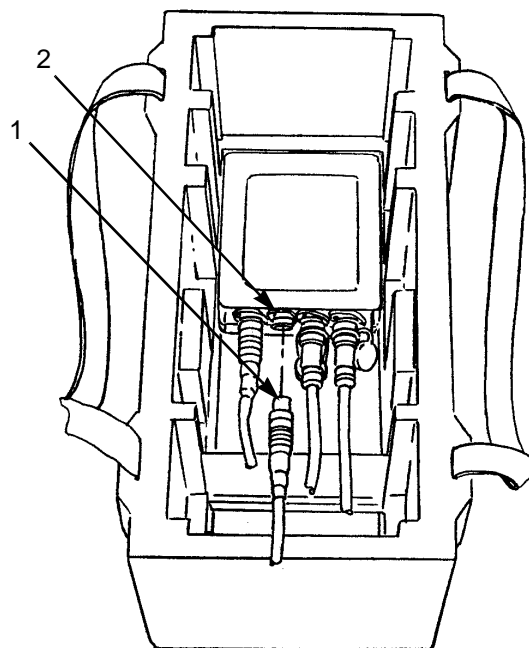
1. Remove vehicle interface unit (see paragraph 4-20).
2. Remove expansion unit (see paragraph 4-19).
3. Remove RSI unit (see paragraph 4-21).
4. Remove target computer unit (see paragraph 4-23).
5. Remove TBOS video mixer (see paragraph 4-22).
6. Disconnect W5 cable connector J2 (1) from TBOS driver unit connector J2 (2).

b. INSTALLATION

1. Connect W5 cable connector J2 (1) to TBOS driver unit connector J2 (2).
2. Install TBOS video mixer (see paragraph 4-22).
3. Install target computer unit (see paragraph 4-23).
4. Install RSI unit (see paragraph 4-21).
5. Install expansion unit (see paragraph 4-19).
6. Install vehicle interface unit (see paragraph 4-20).

FOLLOW-ON TASKS:

- HE ammunition box lid installed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).



4-31. W6 CABLE REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

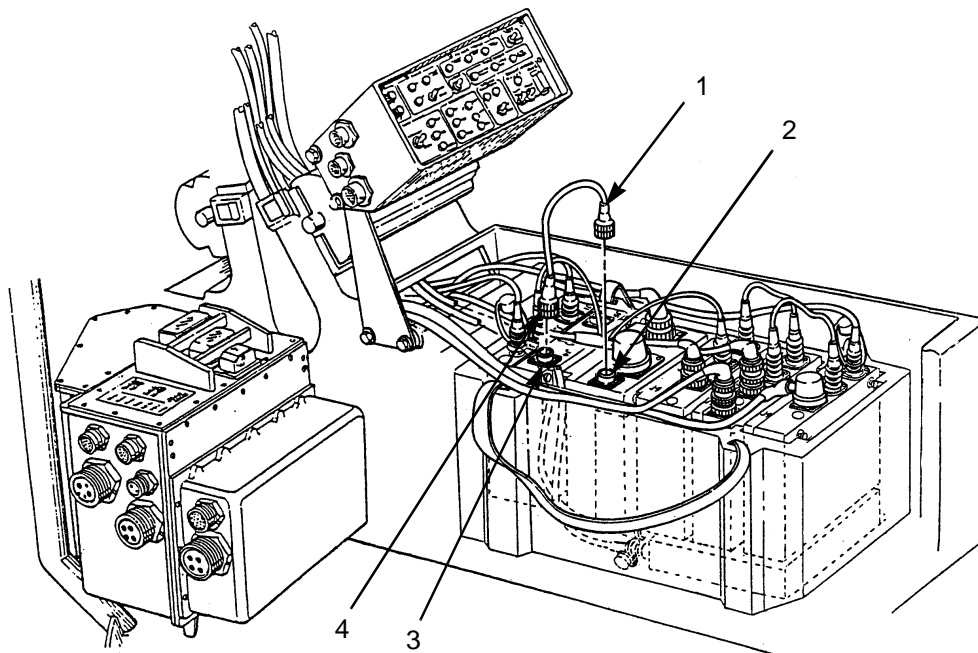
- TM 08594A-10/1A
 - TM 08594A-10/2
-

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

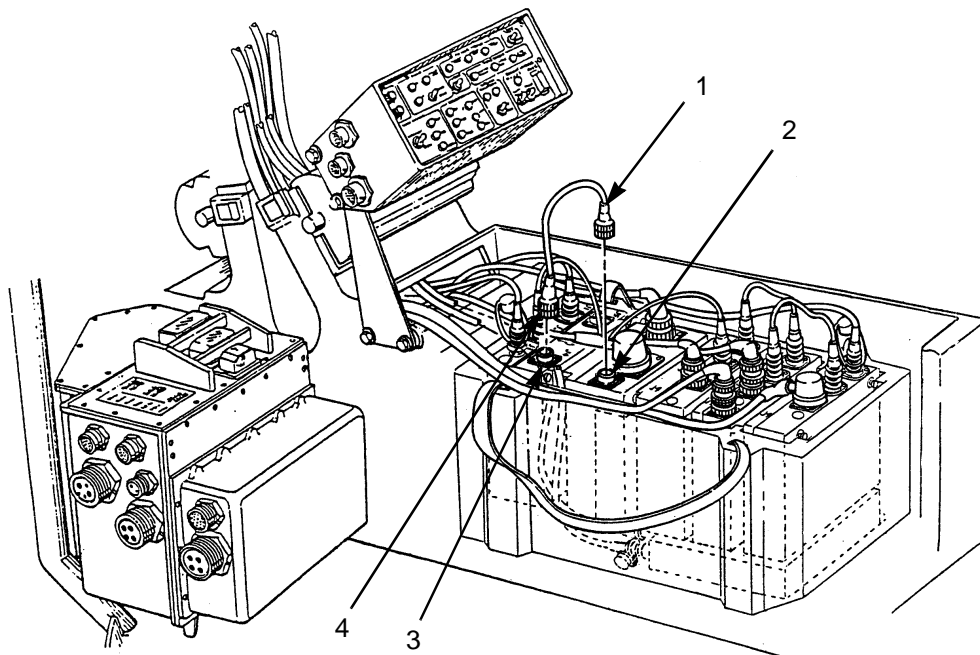
1. Disconnect W6 cable connector J4 (4) from vehicle interface unit connector J4 (3).
2. Disconnect W6 cable connector J1 (1) from expansion unit connector J1 (2).



4-31. W6 CABLE REPLACEMENT (Con't).

b. INSTALLATION

1. Connect W6 cable connector J1 (1) to expansion unit connector J1 (2).
2. Connect W6 cable connector J4 (4) to vehicle interface unit connector J4 (3).



FOLLOW-ON TASKS:

- HE ammunition box lid installed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-32. W7 CABLE REPLACEMENT.

This Task Covers:

- a. Removal

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

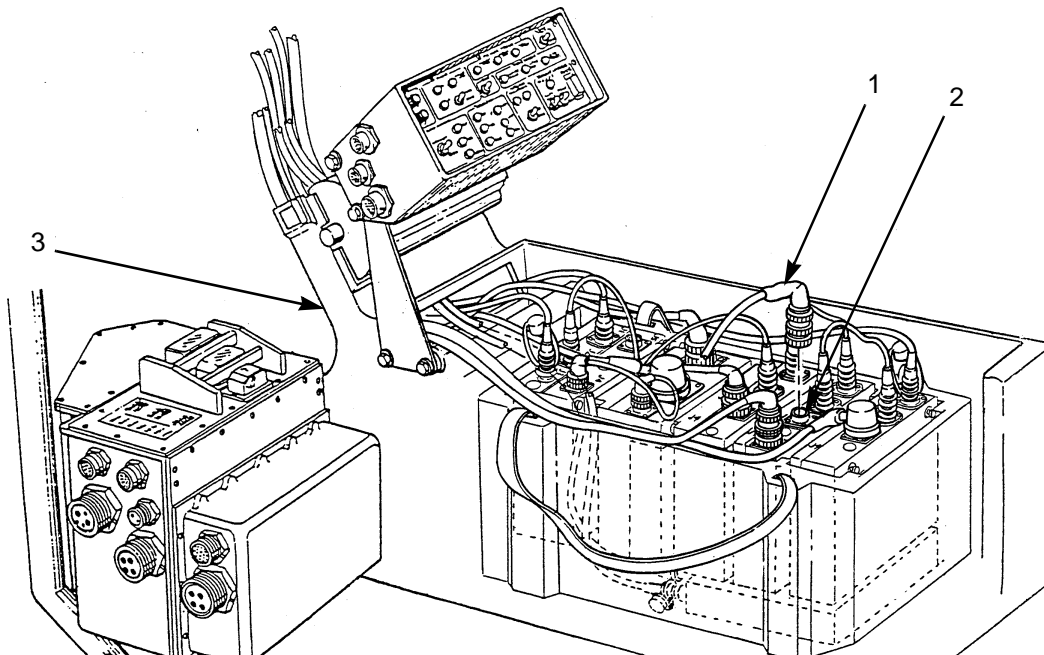
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

- **Vehicle MASTER SWITCH and turret power must be in OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.**
- **TURRET DRIVE LOCK must be in locked position before connecting or disconnecting system components/cables. Failure to follow this warning may result in injury or death to personnel.**

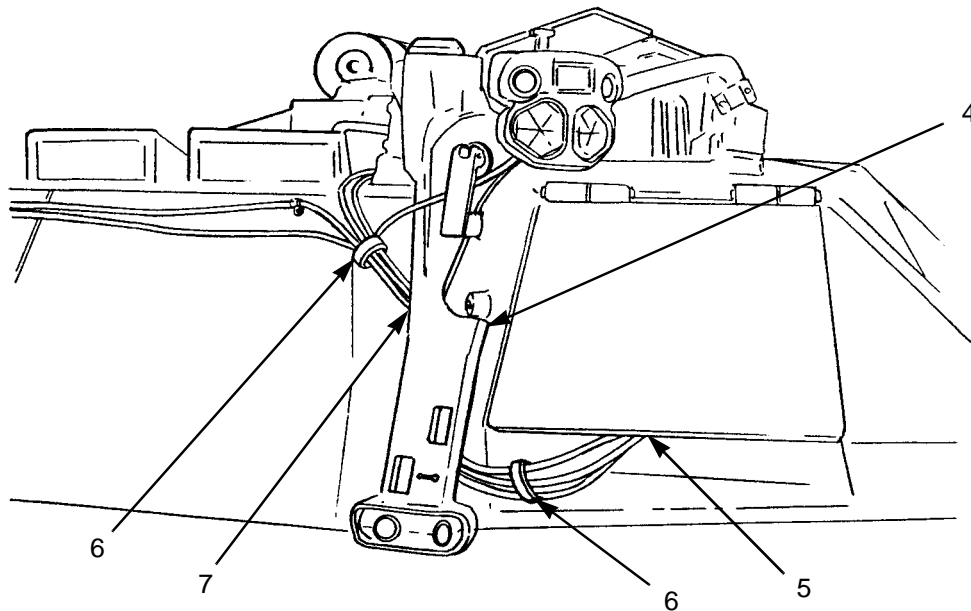
a. REMOVAL

1. Disconnect W7 cable connector J3 (1) from target computer unit connector J3 (2) and feed cable through ammunition feed port (3). At commander's DIM36TH, unfasten velcro strap.

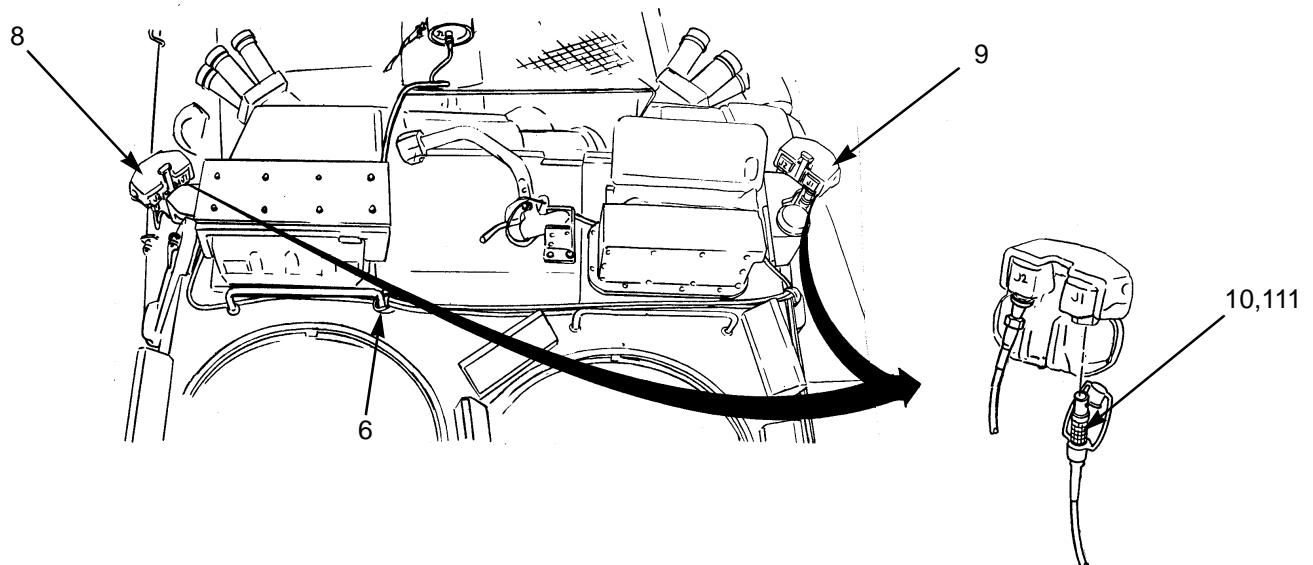


4-32. W7 CABLE REPLACEMENT (Con't).

2. Feed cable to exterior of turret through ammunition ejection port (5).
3. Release velcro straps (6).
4. Unlock, but do not remove, right-front RDU/HDDU assembly bracket (4).
5. Remove W7 cable from routing slot (7) on right-front RDU/HDDU assembly bracket (4).



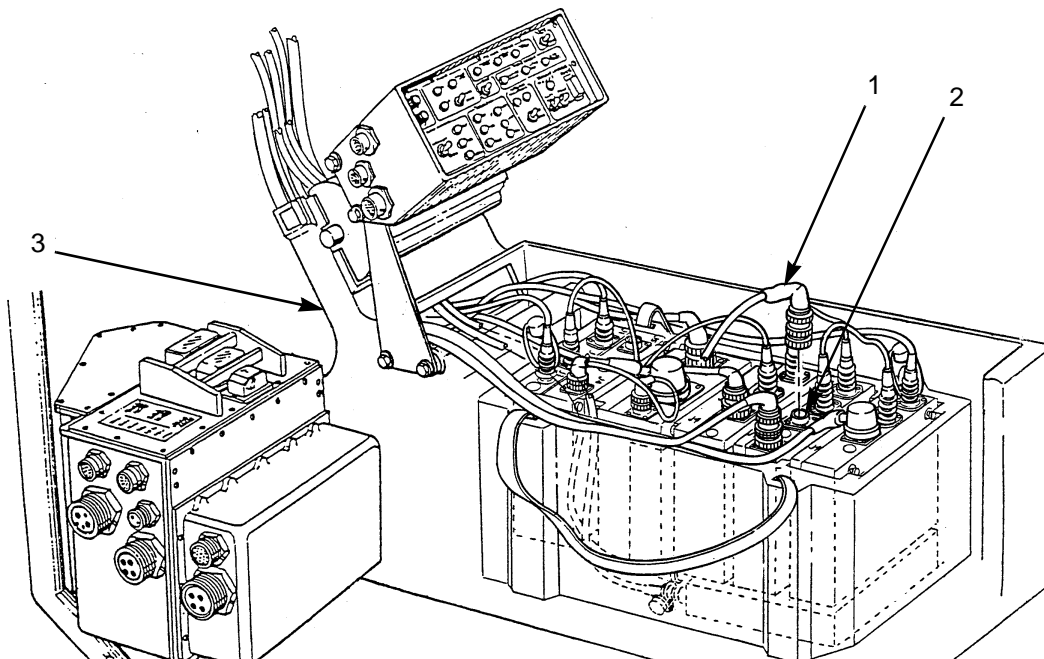
6. Disconnect W7 cable connector J1 (10) from right-front RDU connector J1 (9).
7. Disconnect W7 cable connector J1 (11) from left-front RDU connector J1 (8).



4-32. W7 CABLE REPLACEMENT (Con't).

b. INSTALLATION

1. Connect W7 cable connector J1 (11) to left-front RDU connector J1 (8).
2. Route W7 cable across top of turret between gunner's hatch and sight and commander's hatch and sight.
3. Connect W7 cable connector J1 (10) to right-front RDU connector J1 (9).
4. Route W7 cable through slot (7) provided on right-front RDU/HDDU assembly bracket (4).
5. Lock right-front RDU/HDDU assembly bracket (4) ensuring not to pinch cables in slot (7).
6. Feed W7 cable to interior of turret through ammunition ejection port (5).
7. Secure W7 cable to cable bundle with velcro straps (6).
8. Feed W7 cable connector through ammunition feed port (3). At commander's DIM36TH, secure cable with velcro strap.
9. Connect W7 cable connector J3 (1) to target computer unit connector J3 (2).

**FOLLOW-ON TASKS:**

- HE ammunition box lid installed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-33. W8 CABLE REPLACEMENT.

This Task Covers:

- a. Removal
- b. Installation

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

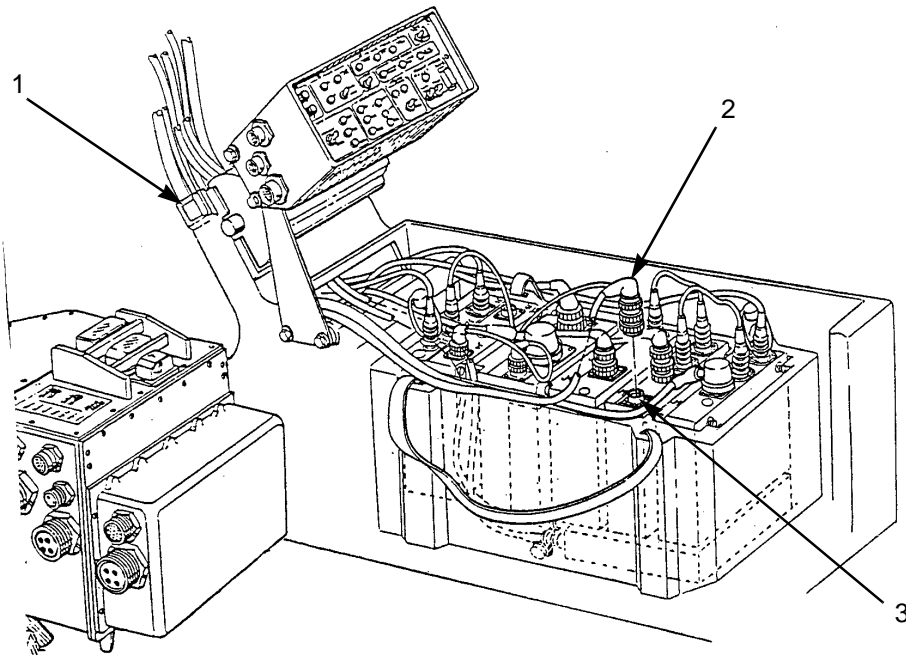
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

- Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.
- TURRET DRIVE LOCK must be in locked position before connecting or disconnecting system components/cables. Failure to follow this warning may result in injury or death to personnel.

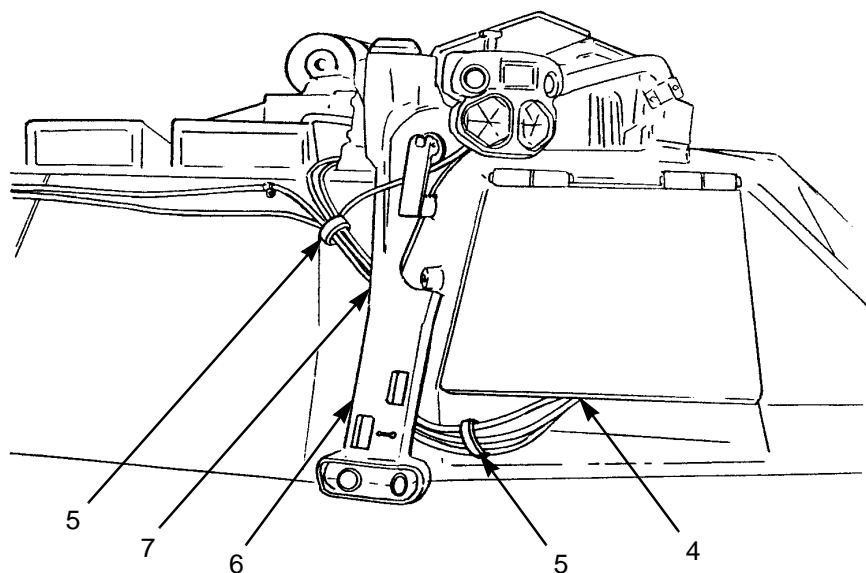
a. REMOVAL

1. Disconnect W8 cable connector J4 (2) from target computer unit connector J4 (3) and feed cable through ammunition feed port (1). At commander's DIM36TH, unfasten velcro strap.

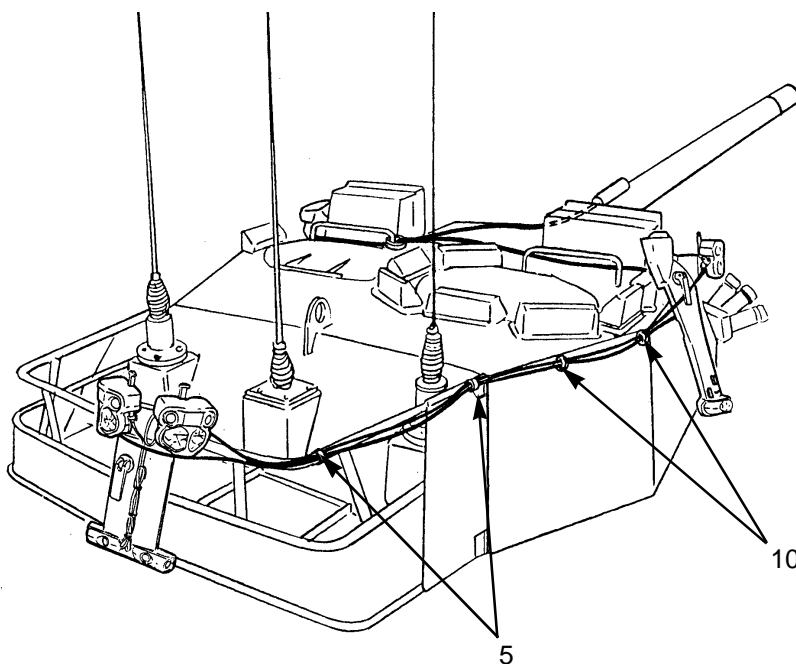


4-33. W8 CABLE REPLACEMENT (Con't).

2. Feed cable to exterior of turret through ammunition ejection port (4).



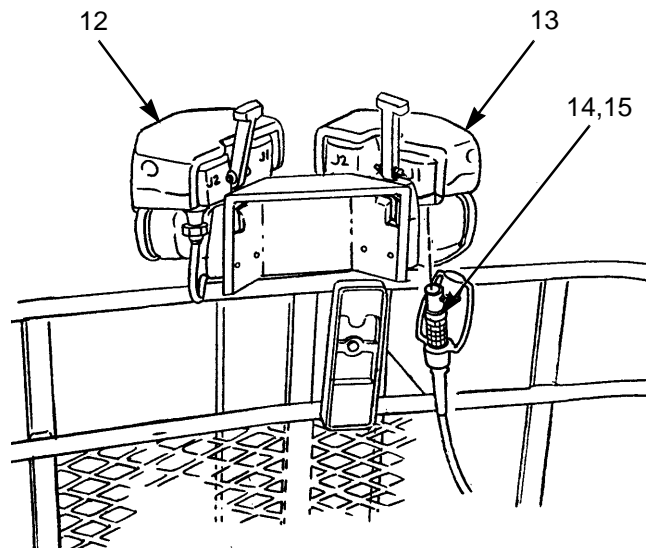
3. Release magnets (10) and velcro straps (5).



4. Unlock, but do not remove, right-front RDU/HDDU bracket (6).
5. Remove W8 cable from routing slot (7) on right-front RDU/HDDU bracket (6).

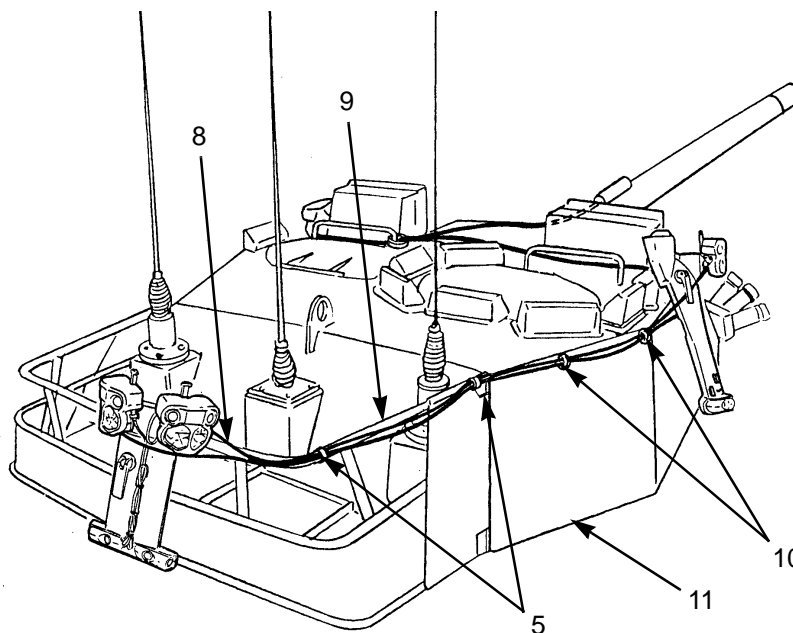
4-33. W8 CABLE REPLACEMENT (Con't).

6. Disconnect W8 cable connector J1 (14) from right-rear RDU connector J1 (12).
7. Disconnect W8 cable connector J1 (15) from left-rear RDU connector J1 (13).



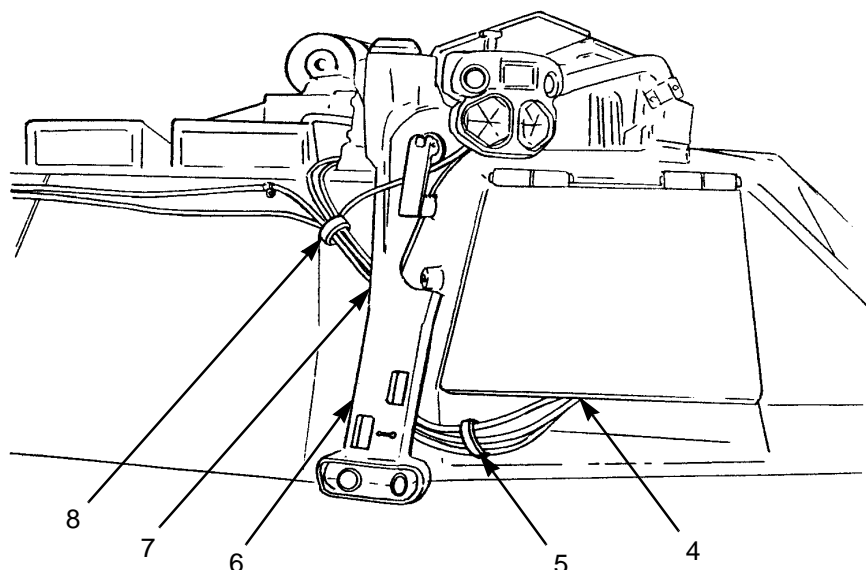
b. INSTALLATION

1. Connect W8 cable connector J1 (14) to right-rear RDU connector J1 (12).
2. Connect W8 cable connector J1 (15) to left-rear RDU connector J1 (13).
3. Route W8 cable (8) forward along bustle rack (9) and contour of turret (11) through slot (7) provided on right-front RDU/HDDU bracket (6).

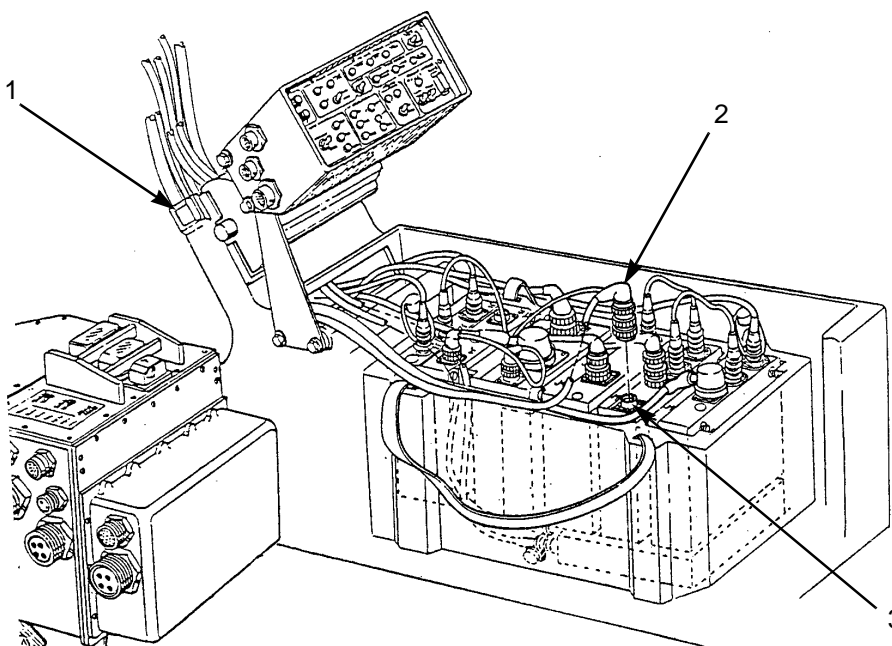


4. Lock right-front RDU/HDDU bracket (6).
5. Feed W8 cable to interior of turret through ammunition ejection port (4).

4-33. W8 CABLE REPLACEMENT (Con't).



6. Feed W8 cable connector through ammunition feed port (1). At commander's DIM36TH, secure cable with velcro strap.
7. Connect W8 cable connector J4 (2) to target computer unit connector J4 (3).



8. Secure W8 cable with magnets (10) and velcro straps (5).

FOLLOW-ON TASKS:

- HE ammunition box lid installed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-34. W9 CABLE REPLACEMENT.

This Task Covers:

- a. Removal
- b. Installation

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

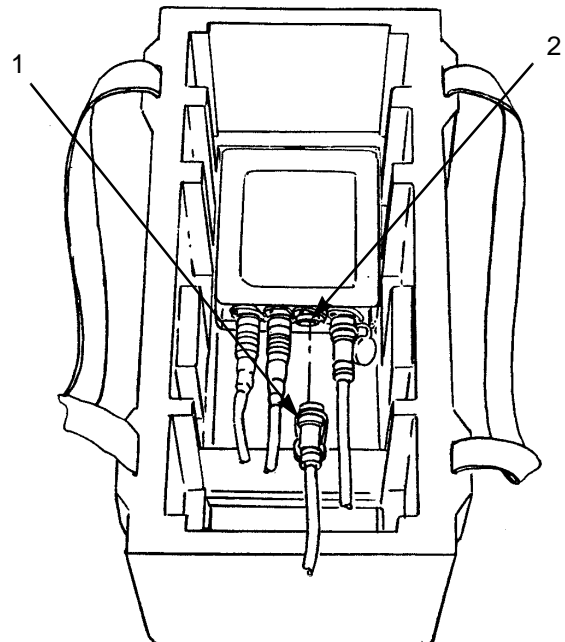
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

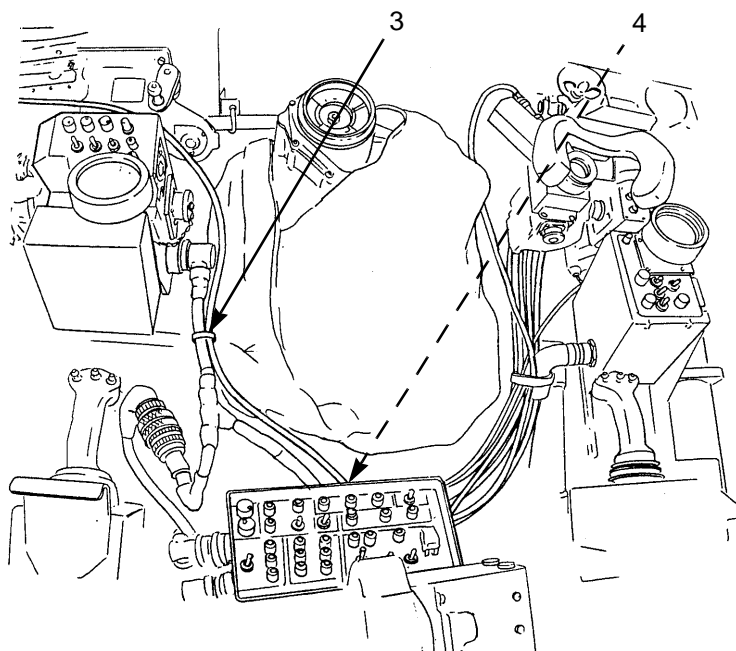
a. REMOVAL

1. Remove vehicle interface unit (see paragraph 4-20).
2. Remove expansion unit (see paragraph 4-19).
3. Remove RSI unit (see paragraph 4-21).
4. Remove target computer unit (see paragraph 4-23).
5. Remove TBOS video mixer (see paragraph 4-22).
6. Disconnect W9 cable connector J3 (1) from TBOS driver unit connector J3 (2).



4-34. W9 CABLE REPLACEMENT (Con't).

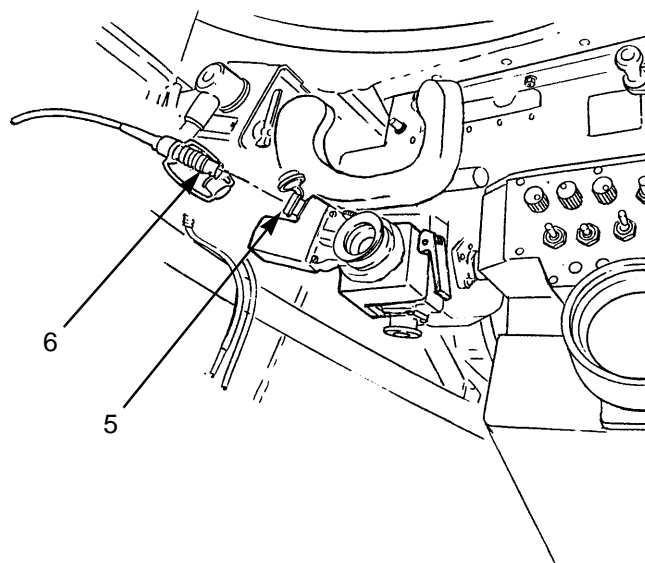
7. Feed cable through ammunition feed port (4) and unfasten velcro strap (3).



8. Disconnect W9 cable connector J1 (6) from gunner's TBOS EU connector J1 (5).

b. INSTALLATION

1. Connect W9 cable connector J1 (6) to gunner's TBOS EU connector J1 (5).
2. Feed cable through ammunition feed port (4) and secure with velcro strap (3).
3. Connect W9 cable connector J3 (1) to TBOS driver unit connector J3 (2).
4. Install TBOS video mixer (see paragraph 4-22).
5. Install target computer unit (see paragraph 4-23).
6. Install RSI unit (see paragraph 4-21).
7. Install expansion unit (see paragraph 4-19).
8. Install vehicle interface unit (see paragraph 4-20).



FOLLOW-ON TASKS:

- HE ammunition box lid installed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-35. W10 CABLE REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

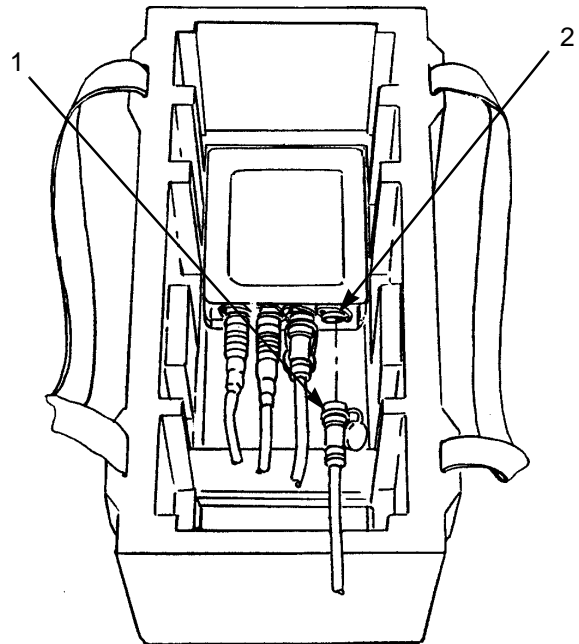
- TM 08594A-10/1A
- TM 08594A-10/2A

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

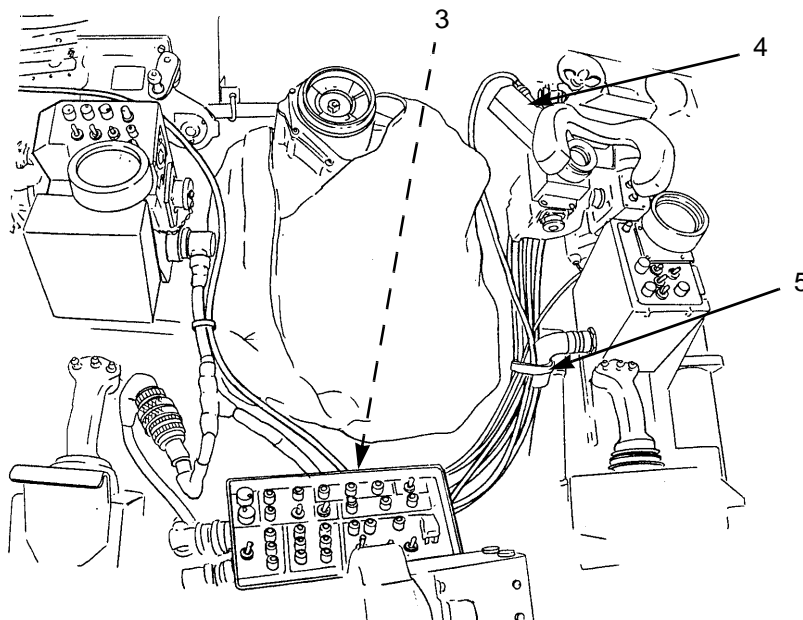
a. REMOVAL

1. Remove vehicle interface unit (see paragraph 4-20).
2. Remove expansion unit (see paragraph 4-19).
3. Remove RSI unit (see paragraph 4-21).
4. Remove target computer unit (see paragraph 4-23).
5. Remove TBOS video mixer (see paragraph 4-22).
6. Disconnect W10 cable connector J4 (1) from TBOS driver unit connector J4 (2).



4-35. W10 CABLE REPLACEMENT (Con't).

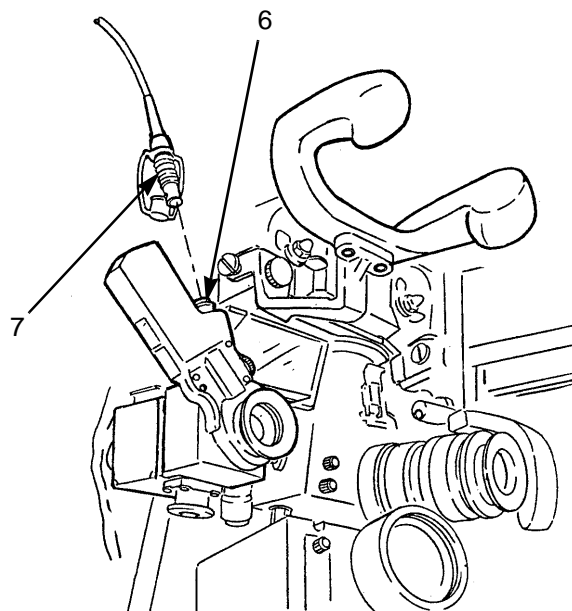
7. Feed cable through ammunition feed port (3) and unfasten velcro strap (5).



8. Disconnect W10 cable connector J1 (7) from commander's TBOS EU connector J1 (6).

b. INSTALLATION

1. Connect W10 cable connector J1 (7) to commander's TBOS EU connector J1 (6).
2. Feed cable through ammunition feed port (3) and secure with velcro strap (5) ensuring there is no slack in cable between velcro strap (5) and commander's TBOS EU (4).
3. Connect W10 cable connector J4 (1) to TBOS driver unit connector J4 (2).
4. Install TBOS video mixer (see paragraph 4-22).
5. Install target computer unit (see paragraph 4-23).
6. Install RSI unit (see paragraph 4-21).
7. Install expansion unit (see paragraph 4-19).
8. Install vehicle interface unit (see paragraph 4-20).



FOLLOW-ON TASKS:

- HE ammunition box lid installed (see TM 08594A-10-1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-36. W11 CABLE REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

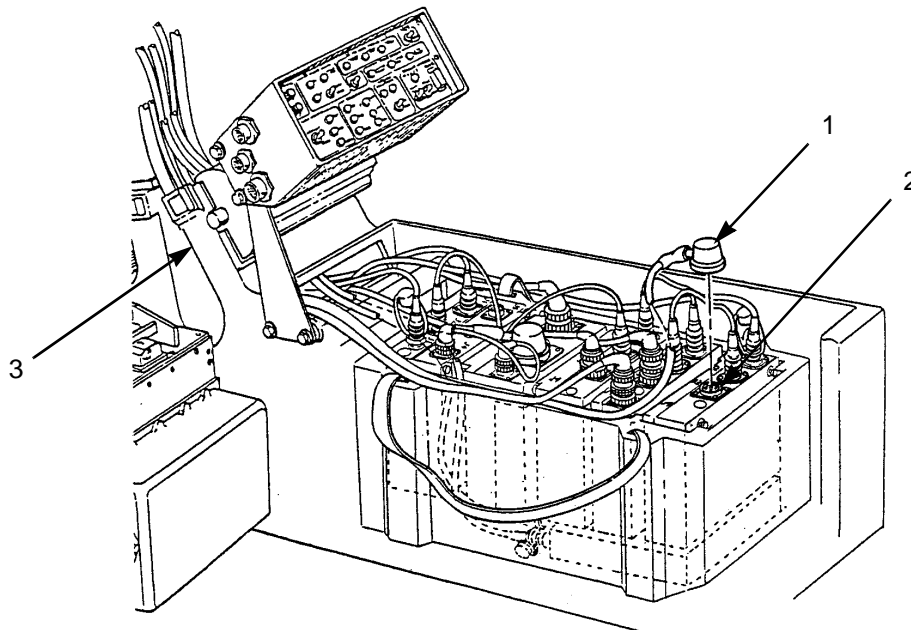
- TM 08594A-10/1A
 - TM 08594A-10/2
-

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

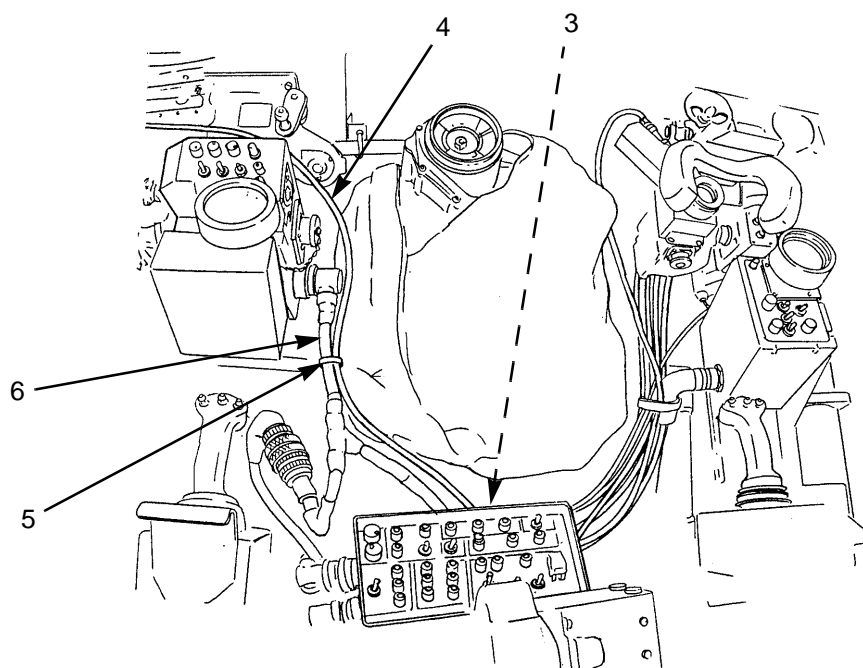
a. REMOVAL

1. Disconnect W11 cable connector J3 (1) from TBOS video mixer connector J3 (2).

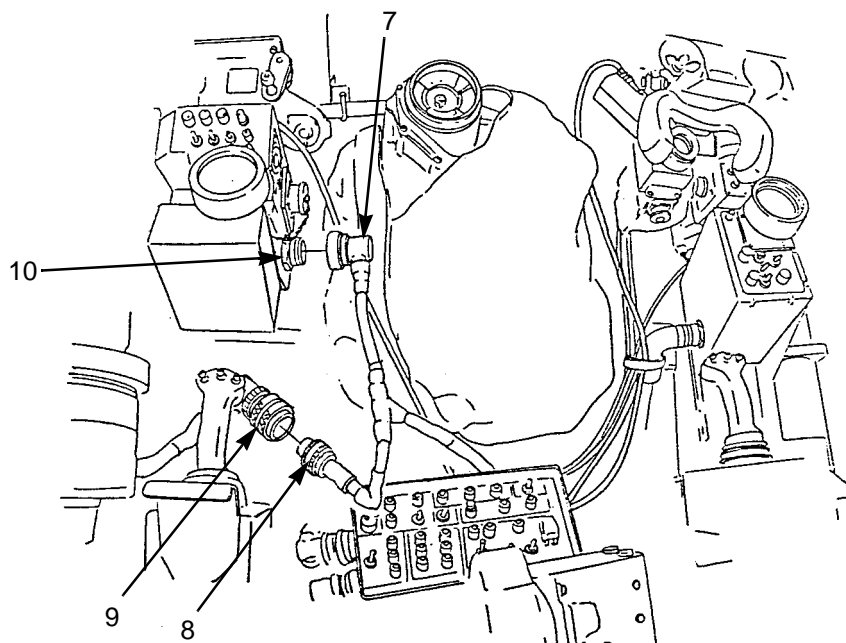


2. Feed cable through ammunition feed port (3) and unfasten velcro strap (5).

4-36. W11 CABLE REPLACEMENT (Con't).



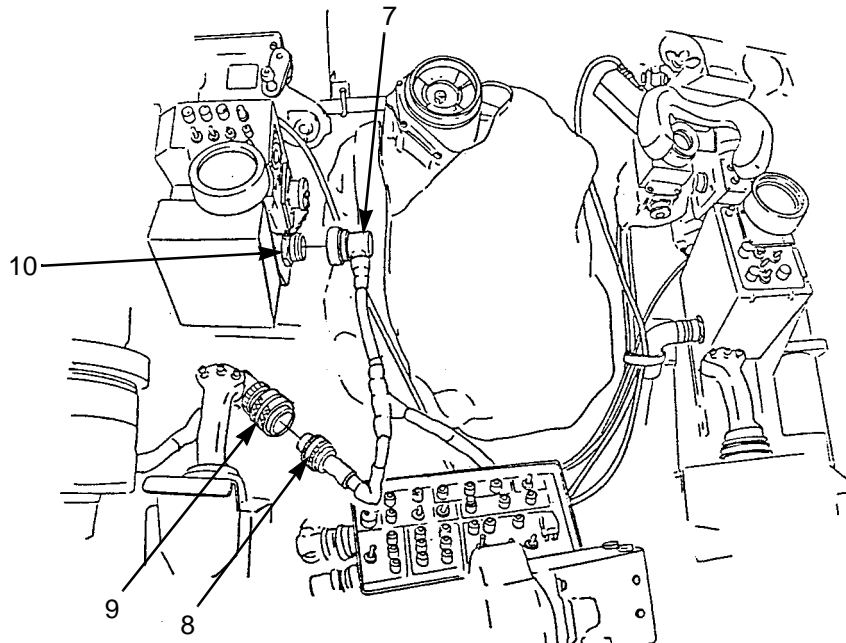
3. Disconnect W11 HIRE sight connector (7) from gunner's DIM36TH sight (10).
4. Disconnect W11 HIRE cable connector (8) from gunner's DIM36TH sight cable (9).



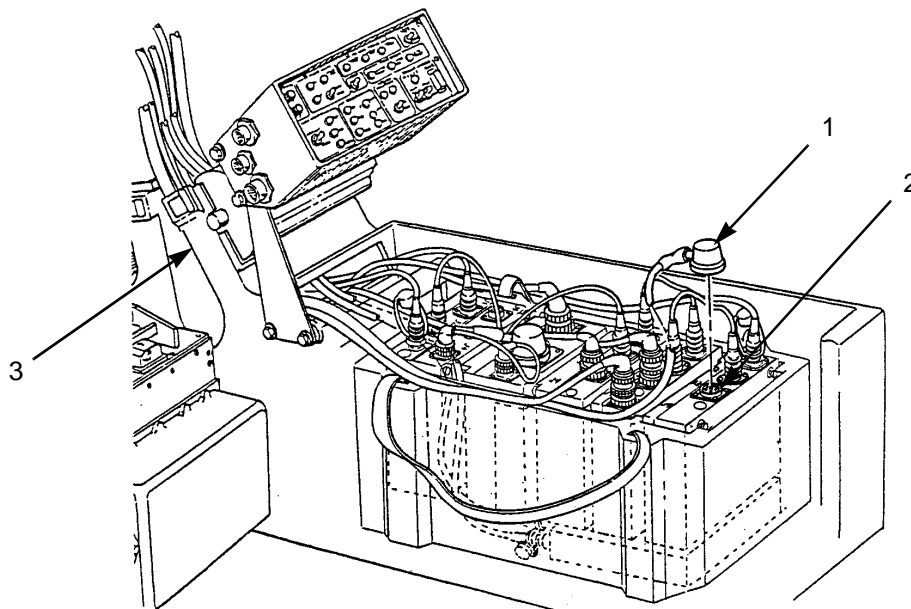
4-36. W11 CABLE REPLACEMENT (Con't).

b. INSTALLATION

1. Connect W11 HIRE cable connector (8) to gunner's DIM36TH sight cable (9).
2. Connect W11 HIRE sight connector (7) to gunner's DIM36TH sight (10).

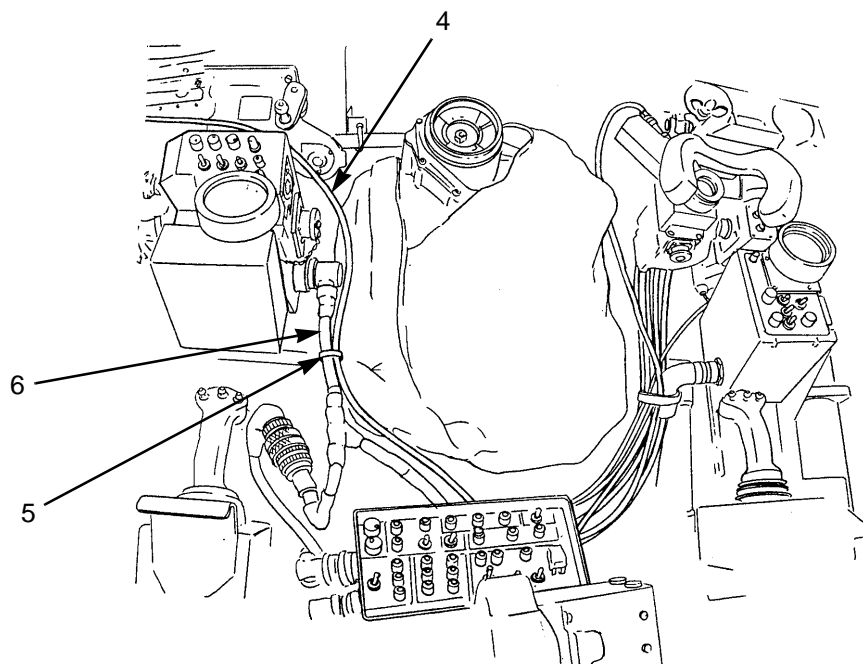


3. Feed cable through ammunition feed port (3).
4. Connect W11 cable connector J3 (1) to TBOS video mixer connector J3 (2).



4-36. W11 CABLE REPLACEMENT (Con't).

5. Secure W11 cable (6) to W9 cable (4) with velcro strap (5).

**FOLLOW-ON TASKS:**

- HE ammunition box lid installed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-37. W12 CABLE REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

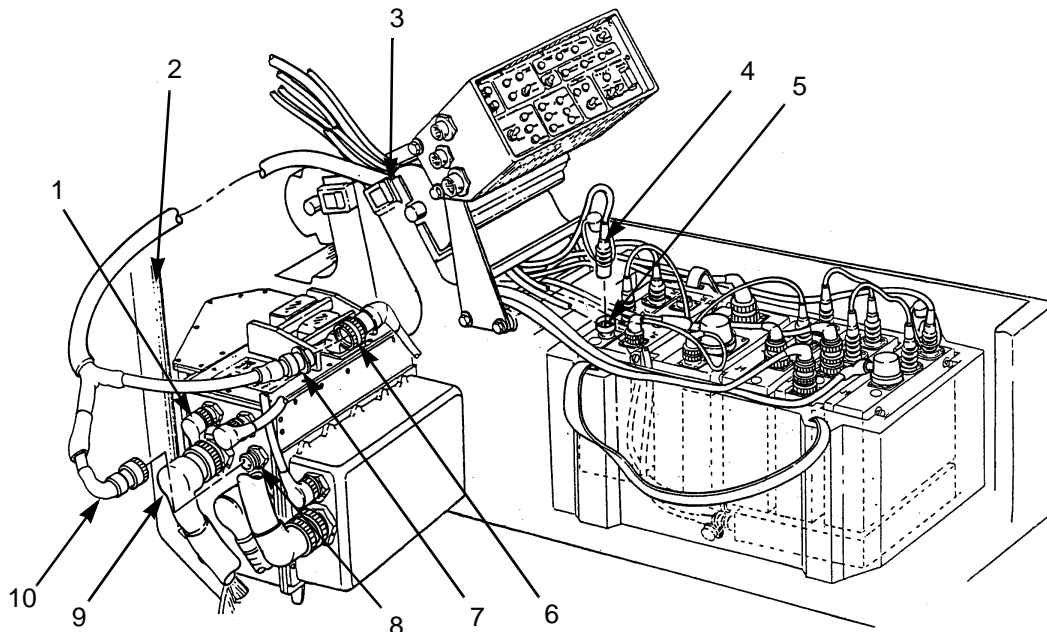
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

- **Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.**
- **TURRET DRIVE LOCK must be in locked position before connecting or disconnecting system components/cables. Failure to follow this warning may result in injury or death to personnel.**

a. REMOVAL

1. Disconnect W12 cable connector J3 (4) from vehicle interface unit connector J3 (5).
2. Feed cable through ammunition feed port (3).
3. For ease of removal, disconnect PDA vehicle cable connectors J1 (9) and J4 (1).



4-37. W12 CABLE REPLACEMENT (Con't).

4. Disconnect W12 cable connector PDA J3 (10) from PDA connector J3 (8).
5. Disconnect W12 cable connector TO CABLE W106P1 (7) from PDA vehicle cable connector W106P1 (6).

b. INSTALLATION

1. Feed W12 cable connector J3 (4) through ammunition feed port (3) and connect to vehicle interface unit connector J3 (5).
2. Feed remainder of W12 cable to PDA positioning cable inside of turret support structure (2).
3. Connect W12 cable connector PDAJ3 (10) to PDA connector J3 (8).
4. Connect W12 cable connector TO CABLE W106P1 (7) to PDA vehicle cable connector W106P1 (6).
5. Connect PDA vehicle cable connectors J1 (9) and J4 (1).

FOLLOW-ON TASKS:

- HE ammunition box lid installed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-38. W13 CABLE REPLACEMENT.

This Task Covers:

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

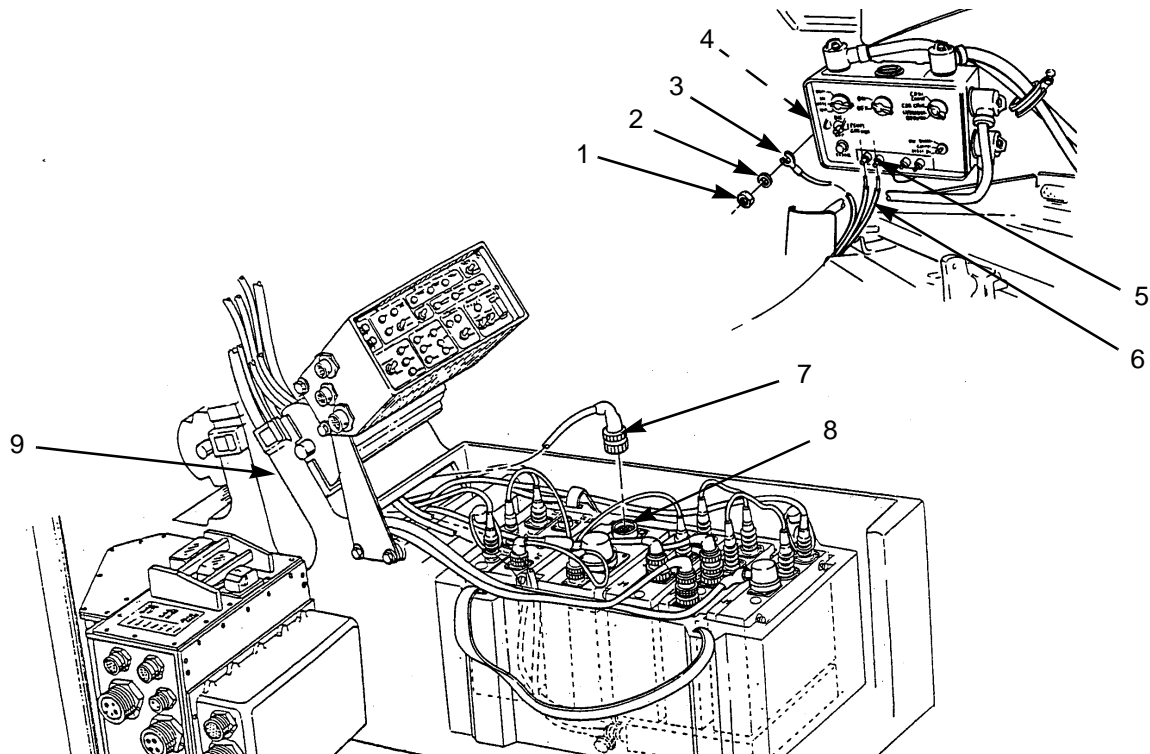
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

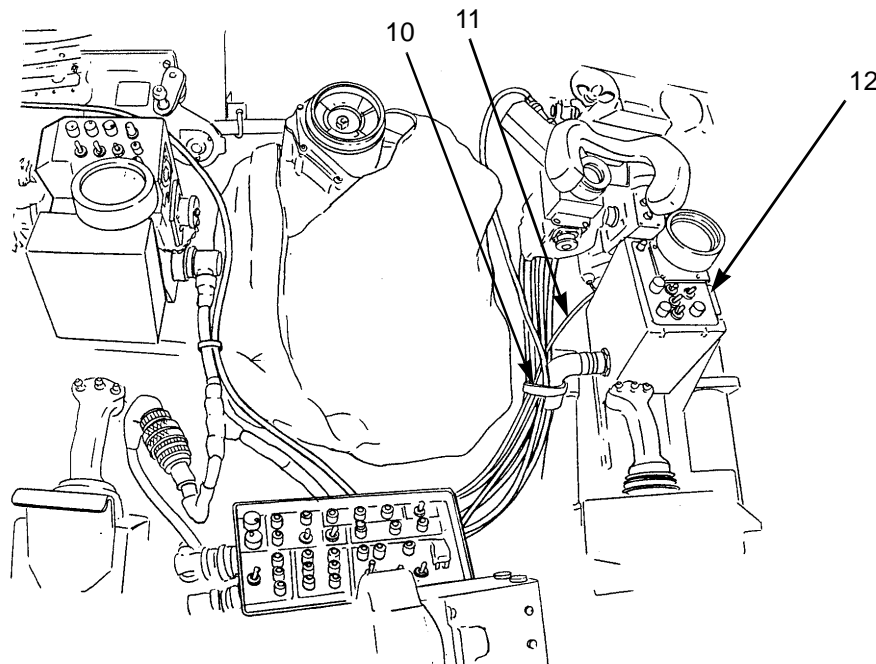
a. REMOVAL

1. Disconnect W13 cable connector J3 (7) from expansion unit connector J3 (8).
2. Feed cable through ammunition feed port (9).



4-38. W13 CABLE REPLACEMENT (Con't).

3. Disconnect W13 cable assembly chassis ground lead (3) at left AM 7162 mounting stud (4) by removing nut (1) and washer (2).
4. Disconnect W13 cable assembly AUDIO INPUT 7162 and GRD 7162 cable leads (6) from AM 7162 amplifier terminals (5).
5. Unfasten velcro strap (10).



b. INSTALLATION

1. Connect W13 cable assembly AUDIO INPUT 7162 and GRD 7162 cable leads (6) to AM 7162 amplifier terminals (5).
2. Connect W13 cable assembly chassis ground lead (3) at left AM 7162 mounting stud (4) with washer (2) and nut (1).
3. Feed W13 cable (11) over commander's DIM36TH sight (12) and down through ammunition feed port (9).
4. Connect W13 cable connector J3 (7) to expansion unit connector J3 (8).
5. Secure with velcro strap (10).

FOLLOW-ON TASKS:

- HE ammunition box lid installed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-39. W14 CABLE REPLACEMENT.

a. Removal

b. Installation

Initial Setup:

Equipment Conditions:

- HE ammunition box lid removed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH OFF (see TM 08594A-10/2).
- Turret power OFF (see TM 08594A-10/1A).

References:

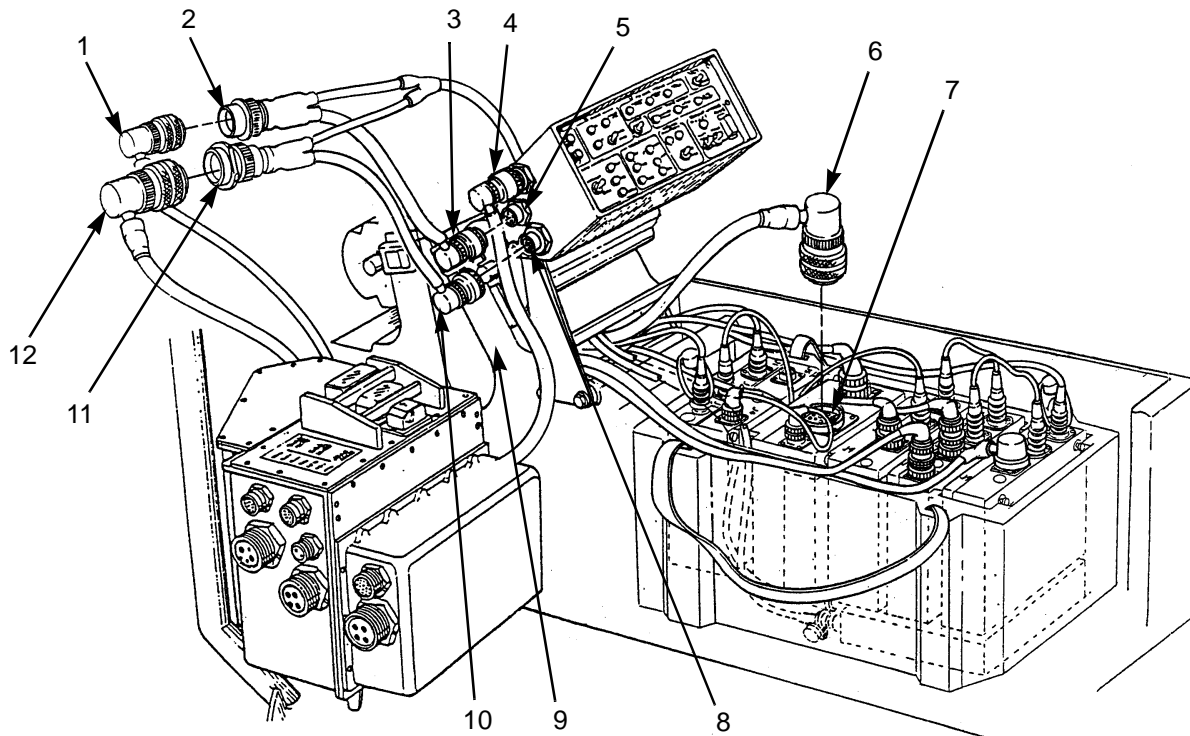
- TM 08594A-10/1A
- TM 08594A-10/2

WARNING

Vehicle MASTER SWITCH and turret power must be OFF before connecting or disconnecting system components/cables. Failure to follow this warning may cause turret or 25 mm gun movement, resulting in injury or death to personnel.

a. REMOVAL

1. Disconnect W14 cable connector J2 (6) from expansion unit connector J2 (7).
2. Feed cable through ammunition feed port (9).
3. Disconnect W14 cable connector W105P5 (2) from CDA vehicle cable connector W105P5 (1).



4-39. W14 CABLE REPLACEMENT (Con't).

4. Disconnect W14 cable connector W105P4 (11) from CDA vehicle cable connector W105P4 (12).
5. For ease of removal, disconnect CDA vehicle cable connector W107P1 (4) from CDA connector J3 (TOP).
6. Disconnect W14 cable connector CDAJ2 (3) from CDA connector J2 (CENTER) (5).
7. Disconnect W14 cable connector CDAJ1 (10) from CDA connector J1 (BOTTOM) (8).

b. INSTALLATION

1. Connect W14 cable connector CDAJ1 (10) to CDA connector J1 (BOTTOM) (8).
2. Connect W14 cable connector CDAJ2 (3) to CDA connector J2 (CENTER) (5).
3. If disconnected, connect CDA vehicle cable connector W107P1 (4) to CDA connector J3 (TOP).
4. Connect W14 cable connector W105P4 (11) to CDA vehicle cable connector W105P4 (12).
5. Connect W14 cable connector W105P5 (2) to CDA vehicle cable connector W105P5 (1).
6. Feed cable through ammunition feed port (9).
7. Connect W14 cable connector J2 (6) to expansion unit connector J2 (7).

FOLLOW-ON TASKS:

- HE ammunition box lid installed (see TM 08594A-10/1A).
- Vehicle MASTER SWITCH ON (see TM 08594A-10/2).
- Turret power ON (see TM 08594A-10/1A).
- Perform BIT (see paragraph 2-6).

4-40. OFF-VEHICLE TEST PROCEDURES.

This Task Covers:

- a. Test Setup

b. Test Procedures
- c. Test Completion

Initial Setup:

Equipment Conditions:

- PGS removed from vehicle (see paragraphs 2-21 and 2-22).

Tools/Test Equipment:

- Off-vehicle power supply

References:

- TM 9-6920-711-12&P-1
-

a.

TEST SETUP

1.

Inventory PGS components to ensure that none are missing. Perform Operator/Crew PMCS (see Chapter 3, Section I).
2.

Place both storage cases side by side on floor. Place all PGS components, except loose cables, in storage cases (see paragraph 2-2).

NOTE

- **Refer to paragraph 1-10 and applicable cable replacement task to aid in cable connections.**
- **As cable connections are made, individual PGS components may need to be rotated or lifted at one end in storage case so that connectors can be accessed.**

3.

Connect W1 cable (see paragraph 4-26).
4.

Ensure permanently attached ends of W2 cable are securely connected to TBOS video mixer J2 and target computer unit J2 (see paragraph 4-27).
5.

Ensure permanently attached ends of W3 cable are securely connected to target computer unit J1 and RSI unit J1 (see paragraph 4-28).
6.

Ensure permanently attached end of W4 cable is securely connected to RSI unit J2 (see paragraph 4-29).
7.

Ensure permanently attached end of W5 cable is securely connected to vehicle interface unit J2 (see paragraph 4-30).
8.

Ensure permanently attached ends of W6 cable are securely connected to vehicle interface unit J4 and expansion unit J1 (see paragraph 4-31).
9.

Ensure permanently attached ends of hull defilade detector unit cables are securely connected to parent retro detector unit connectors J2 (see paragraphs 4-12 and 4-14).
10.

Connect W7 cable (see paragraph 4-32).
11.

Connect W8 cable (see paragraph 4-33).
12.

Connect W9 cable connector J1 to gunners TBOS EU J1 (see paragraph 4-34).
13.

Connect W10 cable connector J1 to commander's TBOS EU J1 (see paragraph 4-35).
14.

Connect RSI antenna cable (see paragraph 4-13).
15.

Connect control panel cable (see paragraph 4-24).
16.

Connect W11 cable connector J3 to TBOS video mixer J3 (see paragraph 4-36).

4-40. OFF-VEHICLE TEST PROCEDURES (Con't).

17. Connect W13 cable connector J3 to expansion unit J3 (see paragraph 4-38).
18. Connect W14 cable connector J2 to expansion unit J2 (see paragraph 4-39).
19. Install a TDRS memory card, set up with PGS LAV application, in control panel (see TM 9-6920-711-12&P-1).
20. Connect off-vehicle power supply cable marked J3 between off-vehicle power supply and vehicle interface unit J3.

b. TEST PROCEDURES

1. Connect power cord of off-vehicle power supply to 110/220 volt outlet. Turn on power.
2. Perform BIT (see paragraph 2-6).
3. Correct all error messages indicated on PGS control panel and isolate components that cause errors. Follow instructions in Operator/Crew Troubleshooting Procedures (see Chapter 3, Section II) and Unit Troubleshooting Procedures (see Chapter 4, Section IV).
4. Notify Contractor Logistic Support (CLS) if faulty components are found or assistance is required.

c. TEST COMPLETION

1. Turn off power and disconnect power cord from vehicle interface unit J3.
2. Disconnect control panel cable (see paragraph 4-24).
3. Disconnect RSI antenna cable (see paragraph 4-13).
4. Disconnect W10 cable (see paragraph 4-35).
5. Disconnect W9 cable (see paragraph 4-34).
6. Disconnect W8 cable (see paragraph 4-33).
7. Disconnect W7 cable (see paragraph 4-32).
8. Disconnect W11 cable (see paragraph 4-36).
9. Disconnect W13 cable (see paragraph 4-38).
10. Disconnect W14 cable (see paragraph 4-39).
11. Disconnect W1 cable (see paragraph 4-26).

FOLLOW-ON TASKS:

- Remove TDRS memory card from PGS control panel.
- Store PGS components and cables in storage cases (see paragraph 2-2).

